DOES NOT CIRCULATE

RHODE ISLAND MEDICAL JOURNAL

APRIL, 1956

Annual Meeting, R. I. Medical Society
and the
R. I. Chapter, American Academy of General Practice
May 1, 2 and 3
See Programs on page **208**

UNIVERSITY OF MICHIGAN
MAY 7 - 1956
MEDICAL LIBRARY

FOR THOSE WHO DEVELOP
NASAL CONGESTION
ON RESERPINE THERAPY
'Sandril' c 'Pyronil'
(PYRROBUTAMINE, LILLY)
About 50% of all patients experience this annoying side-effect. 'Sandril' c 'Pyronil' relieves 75% of those affected.
Each tablet combines 0.25 mg. 'Sandril' and 7.5 mg. 'Pyronil.'
Lilly
571075

no nicer way to . . . . . .

SUSPENSION Chloromycetin® PALMITATE

pleasant-tasting CHLOROMYCETIN for pediatric use

When a youngster's condition calls for CHLOROMYCETIN (chloramphenicol, Parke-Davis) you can make the treatment pleasant by prescribing SUSPENSION CHLOROMYCETIN PALMITATE. Because children like the taste of this custard-flavored suspension, missed doses and spilled doses are avoided. Each teaspoonful is willingly taken...and swallowed.

Precise adjustment of dosage, as directed, is made easier for the child's mother with SUSPENSION CHLOROMYCETIN PALMITATE. The fact that it needs no refrigeration is an added convenience.

CHLOROMYCETIN is a potent therapeutic agent and, because certain blood dyscrasias have been associated with its administration, it should not be used indiscriminately or for minor infections. Furthermore, as with certain other drugs, adequate blood studies should be made when the patient requires prolonged or intermittent therapy.

supplied:
SUSPENSION CHLOROMYCETIN PALMITATE,
containing the equivalent of 125 mg.
of **CHLOROMYCETIN** per 4 cc.,
is available in 60-cc. vials.

The RHODE ISLAND MEDICAL JOURNAL

Editorial and Business Office: 106 Francis Street, Providence, R. I.

Editor-in-Chief: PETER PINEO CHASE, M.D.

Managing Editor: JOHN E. FARRELL

Owned and Published Monthly by

THE RHODE ISLAND MEDICAL SOCIETY

Entered as second-class matter at the post office at Providence, Rhode Island

Single copies, 25 cents . . . Subscription, $2.00 per year.

Volume XXXIX, No. 4 April, 1956

TABLE OF CONTENTS

PAGE

POSTOPERATIVE SHOCK FOLLOWING CORTISONE TREATMENT, *Paul T. Welch,* M.D. 191

TECHNIQUE FOR SUPPLEMENTING CORONARY CIRCULATION BY MEANS OF A SPLENIC GRAFT, Preliminary Report, *Edward I. Seltzer,* M.D. and *Stephen J. Maddock,* M.D. 195

INFANTILE ECZEMA, *William P. Buffum,* M.D. 198

HEALTH EDUCATION AND MEDICAL RESEARCH, *Hon. John E. Fogarty,* M.C. 200

16th ANNUAL CONGRESS ON INDUSTRIAL HEALTH, *Stanley Sprague,* M.D. 214

EDITORIALS

Thanks, Mr. Eisenhower 203

145th Annual Meeting 203

Cancer Society's Good Job 204

A.M.A. Dues 204

Butler Hospital 204

Public Support Needed 205

A Medical Aristocrat 205

DEPARTMENTS

Book Review 206

R. I. Medical Society, Annual Meeting 208

District Medical Society Meeting 218

Through the Microscope 222

Providence Health Department Report of 1955 226

Woman's Auxiliary, Annual Meeting 230

Medical Record Librarians, Annual Meeting 231

MISCELLANEOUS

Cancer Study Scheduled 197

Polio Vaccine in Rhode Island 202

Disability Freeze 206

A Clinical Analysis of HR 7225 220

First Annual Postgraduate Day 230

Index of Advertisers 231

Providence Medical Association, Annual Dinner and Golf Tournament 232

Meat...

and Energy While Reducing

Whatever the origin of obesity, a foremost consideration in any weight reducing program is the establishment of a negative caloric balance by means of an acceptable low-calorie diet which does not produce inanition, irritability, or personality changes.* A reducing diet which does not require renouncement of customarily used foods and which provides sufficient nutrient energy for sustaining vigor, increases the chances for permanent adjustment in food habits. Only by such permanent habit change can normal weight be maintained once it is reached by dieting.

Clinical experience shows that the best diet for reducing is a normal diet modified by reduction in portion size of certain foods rather than by their elimination. Desirable and necessary foods in the "ideal reducing diet" include "meat, poultry, fish, eggs, milk and other dairy products, leafy green and yellow vegetables, citrus fruits, and enriched and whole grain products."*

Lean meat, providing, as it does, important amounts of top quality protein, B vitamins, and essential minerals, is recognized as a valuable food in the reducing diet, as well as in the maintenance diet following a reducing program. It supplies only a moderate quantity of calories as food energy, it has great satiety value, and it provides energy relatively slowly, thus contributing to a sense of well-being and vigor.

*Berryman, G. H.: Obesity—A Brief Review of the Problem, Metabolism *3*:544 (Nov.) 1954.

†The nutritional statements in this advertisement have been reviewed by the Council on Foods and Nutrition of the American Medical Association and found consistent with current authoritative medical opinion.

American Meat Institute
Main Office, Chicago...Members Throughout the United States

The RHODE ISLAND MEDICAL JOURNAL

VOL. XXXIX APRIL, 1956 NO. 4

POSTOPERATIVE SHOCK FOLLOWING CORTISONE TREATMENT*

PAUL T. WELCH, M.D.

The Author. *Paul T. Welch, M.D., Resident in Surgery, Rhode Island Hospital, Providence, Rhode Island.*

DURING THE past ten years there have been many advances in the medical therapy which have become available to the general public. The laity is quite aware of the benefits of the treatments but is less well informed of the potentially serious side-effects. It is usually a matter of time, circumstance, or both before the unsuspected undesirable effects appear and eventually patient, physician, surgeon and public become aware of such.

One of the new drugs becoming more available to the public is Cortisone, its derivatives, and compounds containing the steroid. It is only within the past five years or so that a sufficient number of patients have been treated with the cortical steroids to cause the general surgeon to be acutely aware of the potentially hazardous consequences of anesthesia and surgery on such patients. Because of the unpredictability of the effect of the dosage, duration, and interval between cessation of steroid treatment and surgery on the patient, it becomes necessary to integrate any knowledge of hormone therapy in the routine history and physical, to weigh it accordingly, and be prepared to use preventive or emergency treatment against adrenal insufficiency if suspected.

Such a situation arose at the Rhode Island Hospital. It is the purpose of this paper to present the incident, etiology and preventive measures as noted in the literature.

I. Case Presentation

First admission of a fifty-nine-year-old white, Italian male[1] for RLQ pain of one day's duration with tenderness over McBurney's point. BP 142/84, WBC 15,400 with 80 P, 17 L, 3 M and 0 E.

Course: On day of admission patient had appendectomy for gangrenous vermiform appendix under spinal anesthesia. Operation and anesthesia were uneventful with BP remaining 125 to 100 systolic. Four and one-half hours postoperatively BP dropped to 80/60, P 120 and weak. Patient was cold, clammy with profuse diaphoresis and having chest pain. Patient was begun on Levophed with BP rising to 90 to 120 systolic but dropping again on first postoperative day when Levophed was removed. Cortef 100 mgm. by I.V. infusion was given empirically twice at twelve-hour intervals carrying into second postoperative day. Patient's EKG was negative. On second postoperative day patient improved remarkably and BP stabilized on Cortef alone. The patient was given 50 mgm. cortisone I.M. on second postoperative day and 25 mgm. I.M. on third postoperative day with uneventful recovery thereafter. After Cortef therapy was instituted it was learned the patient had been treated with cortisone two years previously for Rhus dermatitis "in sufficient quantities to cause adrenal depression" according to the medical consultant's note.*

II. Historical Background

The story of the adrenal glands began in the sixteenth century when Eustachius apparently first described them. They were given various designations until finally "adrenal" became the more generally applicable term because of the variable loci of the glands in different species.

In 1849 the true importance of the adrenals was first appreciated by Thomas Addison, when he described destructive lesions in the glands associated with the disease bearing his name.

In 1856 Brown-Séquard made pioneer experiments on the effects of adrenalectomy and concluded that the glands were essential to life. Toward the end of the nineteenth century the discov-

*Presented at a Friday Conference of the Department of Surgery, Rhode Island Hospital, Second Surgical Service.

*The patient had been treated by Dr. Laurence Mori for diabetes mellitus and coronary insufficiency and was given 75 mgm. Cortisone orally daily for eight days two years ago. The patient was followed postoperatively after discharge by Dr. Mori and further treatment of ACTHAR Gel 40 units daily for a week instituted. The patient died suddenly with a story compatible with coronary thrombosis four weeks later. An autopsy was not performed.

continued on next page

ery of the dramatic pharmacological actions of extracts with the adrenal medulla, with the isolation and chemical characterization of epinephrine diverted attention from the adrenal cortex. Not until the 1920's was it generally conceded that the cortex rather than the medulla was the life-maintaining portion of the gland.

In 1929 and '30 Swingle and Pfiffner, Hartman first accomplished preparation of cortical extracts with a reasonable degree of activity. By the middle thirties steroid chemists began to unravel the complex chemistry of the adrenocortical hormones with the synthesis and introduction into therapy of desoxycorticosterone and cortisone.

In the meanwhile other investigators turned their attention to the adenohypophysis. In 1926 Smith and Forster established that hypophysectomy resulted in atrophy of the adrenal cortex.

In 1933 Evans, Houssay and Collip demonstrated that anterior pituitary extracts had a stimulating effect upon the adrenal cortex of the hypophysectionized animal. In 1943 Li and Sayers isolated a protein hormone which acted specifically to cause secretory and morphological changes in the adrenal cortex, called ACTH.

The interest in the physiologic roles of ACTH and cortical steroids was stimulated by the appreciation that many physiological and biochemical responses to stress are dependent upon the integrity of the adenohypophyseal-adrenocortical systems. In 1946 Selye developed an elaborate theory that certain "diseases of adaptation" (hypertension, periarteritis nodosa, nephrosclerosis) resulted from the complex responses of susceptible tissues to the adrenocortical hormones. In 1949 Herech announced the dramatic effects of cortisone and ACTH in diseases other than adrenocortical insufficiency. That basic investigations in attempts to ascertain mechanisms of actions and in therapeutic application were made possible is due to the accomplishments of the commercial laboratories.[2] The story of these drugs is still unfolding. Their limitability of usefulness is still not wholly known. An example of their undesired side-effects, belatedly but fortunately suspected and confirmed on further investigation is presented today in our case history of E.L.

III. Reports of Post-Surgical Shock After Cortisone Treatment

There have been numerous reported cases over the past two to three years of shock following surgical procedures of one sort or another, and also of shock during anesthesia and operations.

Lewis et al[3] report the death of a twenty-year-old white female, treated with about 25 mgm. cortisone daily for five months for rheumatoid arthritis, five and one-half hours after a two and one-half hour surgical procedure consisting of a posterior capsulotomy and tendon lengthening of the right knee. No trouble was encountered during the procedure. Routine shock treatment showed no response. Autopsy findings revealed acute congestion and hemorrhagic infiltration of atrophied adrenal tissue. "The acute reaction and death were attributed to the stress of general anesthesia and surgery, superimposed upon cortisone—induced adrenal insufficiency and failure to supply large amounts of cortisone postoperatively."

Salassa et al[4] report two cases in which acute postoperative adrenal cortical insufficiency was regarded as the cause of death. In the first case the patient had been on about 100 mgm. cortisone q.d. for one year for rheumatoid arthritis. A subtotal gastrectomy Bilroth I procedure was carried out for a gastric ulcer after her cortisone was tapered down to 37.5 mgm. q.d. 100 mgm. cortisone I.M. was given day prior to operation. Thirty hours postoperatively patient went into profound shock and expired. Autopsy findings of atrophic adrenal glands (2.7 gms. and 3 gms.). (Normal is 5 to 10 gms.)

The second case was a fifty-four-year-old female with rheumatoid arthritis with sporadic treatment of cortisone and ACTH over a four-year period receiving two injections of cortisone every week at time of admission. A bilateral bunionectomy was performed after patient had had withdrawal of the drug two months previously. Postmortem findings showed atrophic adrenals with loss of lipid and vacuolization of the zones fasciculata and reticulosis with a narrowed cortex of 1 mm. in width.

Harnagel[5] reports severe adrenocortical insufficiency following joint manipulation in a patient treated with cortisone for a total dose of 1.9 gms. over a four-week period. Cortisone had been omitted preoperatively. The adrenal insufficiency was manifested by shock, coma, diaphoresis, no BP, bilateral Hoffman's signs, 0 eosinophile count. Patient responded to 200 mgm. cortisone I.M. stat and 100 mgm. I.M. every day for five days, Levophed and oxygen, with recovery complete in thirty-six hours.

Lundy[6] reports *On the Present-Day Therapy of Shock for Surgical Patients* during anesthesia and operation. In his experience he has found when patients, either adults or children, have been treated for some time with cortisone or ACTH and treatment is stopped for some time, either for a short or long duration, shock can appear suddenly, which is fatal.

IV. Theory for Cause of Shock

The clinical picture of shock is as follows: "It is most likely to happen during the first twenty-four

hours after operation, appearing as a sudden circulatory collapse, fall in blood pressure, rise in pulse rate and perhaps elevation of temperature.[2]

"In 1933 Loeb and Harrop established the important role of the adrenal cortex in electrolyte metabolism. Negative sodium balance in adrenocortical insufficiency can be attributed to a renal tubular defect in sodium reabsorption. When adrenocortical steroids are lacking, the kidney fails to reabsorb sodium salts and water in amounts adequate to maintain the volume of the extracellular fluids. Proportionately more sodium than water is lost through the kidney and, as a result, the concentration of extracellular sodium decreases. Osmotic forces move water from an extracellular to an intracellular site. Consequently the extracellular fluid volume is decreased whereas the intracellular fluid is increased. The reduced volume of extracellular fluid is reflected in a hypovolemia. The hematocrit value, the concentration of plasma protein, and the viscosity of the blood increases. These factors combine to decrease cardiac output, renal and peripheral blood flow. Blood pressure falls, renal function fails, and a shock-like condition develops. This is probably the major cause of death from adrenocortical insufficiency."[2] Other concomitant factors are to be considered.

One is "the increase in the concentration of potassium in muscle cells and extracellular fluid, which may increase sufficiently to result in signs and symptoms of potassium intoxication. This may account for muscular weakness and fatiguability. The basic defect for potassium abnormalities has been assigned to the kidney. It is felt that potassium secretion is impaired by a renal tubular defect and a positive balance of potassium occurs."[2]

A second factor is that "energy metabolism is affected by the steroids. Desoxycorticosterone is relatively ineffective in restoring muscle strength whereas cortisone and hydrocortisone are highly active.[2]

"The steroids also effect the central nervous system. Adrenal insufficiency is characterized by inability to concentrate and periods of drowsiness which may alternate with restlessness and insomnia. These symptoms are only diminished with desoxycorticosterone therapy and are dramatically relieved by the 11, 17-oxysteroids.[2]

"It is evident that there is a wide range of individual variation in response to therapy with ACTH and cortisone, and the possibility of shock following stress in such patients may be attributed to a Theory of Selye's. This is: The amount of cortical hormone, exogenous, required for therapeutic response may barely satisfy the needs for a homeostatic activity in a given patient. The result of stress will depend upon the functional status of the adrenal tissue cells themselves. That is, the response is governed according to their varying circumstance of eucorticism or hypocorticism."[2]

V. Preventive Therapy

The problem of possible onset of acute adrenal insufficiency should now become more frequent because of an ever increasingly larger percentage of population given steroid treatment for an increasing number of illnesses.

The clinical problem entails a history of steroid treatment and their

(1) selection of those likely to have impaired pituitary and adrenal function and be liable to shock or a result of surgical stress (i.e. Addison's Disease, Cushing's Disease, Bilateral Adrenalectomy and Cortisone treated patients).

(2) prevention of adrenal cortical insufficiency in the susceptible.

(3) treatment of shock when it appears when clinical acumen was poor, or prophylactic treatment was withheld or inadequate.

It is the general opinion that any patient who has received cortisone in significant amounts within three to six months should have prophylactic treatment. Any patient with natural or medically induced hypercortisonism within one to one and one-half years before operation should receive prophylactic treatment.

Theoretically any exogenous dose of steroid equaling or exceeding the daily physiologic requirement (20-25 mgm. hydrocortisone q.d.) may be a suppressive. There is evidence that suppression may occur after five days of Cortisone treatment.

Urinary excretion of corticosteroids or 17 detosteroids, response administration of corticotropin in terms of depression of eosinophiles and changes in urinary excretion of steroids, the "water test," etc., are all procedures that give some measure of adrenal function and are useful in evaluating surgical risk.

Prophylactic treatment in those patients considered a potentially serious hazard for developing adrenal insufficiency is based on experience in treating Addison's disease, pituitary insufficiency and patients with total adrenalectomy. The purpose is to provide a sufficient depot of adrenal steroid in the muscle to insure an adequate and continuing supply of hormone at the critical times during and after operation. It is estimated that the normal glands secrete about 100 mgm. hydrocortisone during stressful twenty-four hour periods, and a replacement of this amount appears indicated. The following regimen is presented: One author suggests 200 mgm. cortisone I.M. 48 hours, 24 hours, and 1 to 2 hours prior to operation. (2 cc. Solu Cortef — soluble hydrocortisone hemisuccurate —

continued on next page

may be given immediately prior to surgery in place of the last mentioned dosage.) Postoperatively the dosage is reduced over three or four days and discontinued. If signs and symptoms of shock appear, intravenous steroid, (Solu Cortef or hydrocortisone hemisuccurate, 100 mgm. in 2 cc. directly over a 60-second period or in a glucose or saline infusion)[7] may be given for immediate affect. 4 mgm. Norepiniphrine (Levophed) added to a saline infusion helps to control circulatory collapse and extreme hypotension. Blood and blood substitutes may be utilized. If the patient can take medication postoperatively, 100 to 200 mgm. cortisone may be administered.[4] (Oral medication effect lasts approximately only eight hours.)

TABLE 1
Salassa et al

Preoperative: Cortisone 200 mgm. I.M. at 48 hours, at 24 hours, and at 1 to 2 hours prior to operation.

Postoperative: Gradual Reduction of dosage over 4 day period.

Emergency: Cortisone IV (Solu Cortef 2 cc.—100 mgm. IV or infusion)
Cortisone I.M. 200 mgm.
Levophed infusion
Blood and/or Blood Substitutes

Another author breaks preoperative and postoperative care into two categories according to whether the patients had been on Cortisone or ACTH. A total dosage of 400 to 600 units ACTH and 300 mgm. cortisone preoperatively for patients who are on cortisone treatment. Postoperative treatment is 100 mgm. cortisone daily over a three-day period and then resumption to preoperative dosage. ACTH is gradually tapered off over a seven-day period.[3]

TABLE 2
Lewis et al
For Patients Receiving Cortisone

Preoperative:

(1) ACTH 20-30 units I. M. q. 6 h. for 5 days prior to surgery or
ACTH 20 units by slow I.V. drip (in 1 liter 5% D/W) over periods of 12-24 hours q.d. for 3 days prior to surgery.

(2) Cortisone I.M. 100 mgm. q.d. for 2 days prior to surgery and again preoperative day of surgery.

Postoperative:

(1) N/S 1 liter I.V. or fluids as indicated by studies.

(2) Cortisone I.M. 25 mgm. q. 6 h. for 2 days, 15 units q. 6 h. for 2 days, 10 units q. 12 h. for 2 days, 5 units q. 12 h. for 1 day.

The regimen for patients who are on ACTH is 100 mgm. Cortisone I.M. q.d. for 2 days prior to surgery and day of surgery and continuation of ACTH. Postoperatively the Cortisone treatment is tapered off over period of 8 days and the continuation of the preoperative ACTH dosage is maintained.[3]

TABLE 3
Lewis et al
For Patients Receiving ACTH

Preoperative:

(1) Cortisone I.M. 100 mgm. q.d. for 2 days prior to surgery and again preoperative day of surgery.

(2) Continue usual ACTH dosage.

Postoperative:

(1) N/S, 1 liter I.V. or fluids as indicated by studies.

(2) Cortisone I.M. 25 mgm. q. 6 h. for 2 days, q. 8 h. for 2 days, q. 12 h. for 2 days, q.d. for 2 days.

(3) Continue usual preoperative ACTH dosage.

For emergency surgery, when preoperative preparation is impossible, indicated management is to continue the usual dose of hormone and add 300 mgm. Cortisone I.M. During the operation I.V. hydrocortisone may be used. Postoperatively cortisone and ACTH should be continued with the tapering off of the appropriate hormone.[3]

TABLE 4
Lewis et al
Emergency Surgery

Preoperative:

(1) Cortisone 300 mgm. I.M.

(2) Cortisone 100 mgm. I.V. (Solu Cortef) during surgery. Repeat if necessary.

(3) Continue usual dosage of hormone.

Postoperative:

(1) ACTH I.V. for patients on cortisone therapy.

(2) Cortisone I.M. for patients on ACTH therapy.

(3) Continue usual hormone.

(4) Observe fluid and electrolyte balance.

Such patients with a history of cortisone and/or ACTH treatment for reasons not understood react to morphia and its derivatives. It would be best to use alternative types of narcotics.

The postoperative management of the water and electrolyte balance in patients with adrenal insufficiency is at best a difficult matter. Such patients do not tolerate excessive quantities of water. Consequently glucose without saline solution should not be given.

To digress somewhat, it is interesting to consider those patients obviously showing the effects of steroid treatment, i.e. weight gain, moon faces,

continued on page 199

TECHNIQUE FOR SUPPLEMENTING CORONARY CIRCULATION BY MEANS OF A SPLENIC GRAFT*

Preliminary Report

EDWARD I. SELTZER, M.D. AND STEPHEN J. MADDOCK, M.D.

The Authors. *Edward I. Seltzer, M.D., of Providence, Rhode Island, Surgeon, Miriam Hospital. Stephen J. Maddock, M.D., Surgical Research Laboratory, Boston City Hospital, Boston, Massachusetts.*

FOR MANY YEARS various investigators have attempted to furnish an additional blood supply to the heart following coronary thrombosis. The literature is well reviewed in recent articles by Key et al,[1] by Adams[2] and also by von Wedal & Lord, et al.[3] The mode of attack has varied but divides itself briefly into three types.

I. Grafts which bring blood to the heart from adjacent structures, such as transplantation of pectoral muscle, Beck,[4] graft of the greater omentum, O'Shaughnessy,[5] graft of the lung, Carter et al,[6] implantation of the internal mammary artery into the myocardium, Vineberg,[7] jejunal graft, Key et al,[1] pedicle skin graft, Moran,[8] and von Wedal & Lord et al.[3]

II. Utilization of the pericardial blood supply. This technique instituted by Beck[9] consists of mechanical scarification of the surface of the heart to remove the epicardium and also of the under surface of the parietal pericardium, and then by inserting certain irritating substances, such as asbestos powder,[9] magnesium silicate, Thompson,[10] phenol, Harken,[11] sodium morrhuate, Heinbecker and Barton[12] talcum powder, Thompson and Plachta[13] and Gorelik.[14] The object of this procedure is to cause vascular adhesions between the myocardium and pericardium, thus bringing additional blood to the heart from the parietal pericardium, the latter structure having a moderately well-established blood supply of its own.

III. Production of retrograde flow in the coronary sinus. Gross, Blum and Silverman[15] partially ligated the coronary sinus in order to prevent venous return. Beck[16] grafted a piece of vein and later used a free segment of artery (left subclavian) between the aorta and the coronary sinus. Several weeks later, the coronary sinus was partially ligated so as to produce a retrograde flow.

*From the Third (Boston University) Surgical Research Laboratory of the Boston City Hospital.

In a recent communication, Adams[2] has well summarized the requirements for any operation which would aid coronary heart disease:

(1) The operation must be simple and easily done so that the patients survive the procedure itself.
(2) There should be many chances for success in building new and real vessels through a wide zone of contact between donor and recipient tissues.
(3) An abundant primary source of blood should be available, diversion of which is not harmful to the organ from which it comes.

During the past eighteen months the authors have been working on a technique which seems to satisfy all these criteria, and they herewith present a preliminary report.

An examination of a number of human cadavers revealed the fact that it is feasible anatomically to transplant the spleen into the thorax and attach it to the heart.

The experimental animals were dogs, in which various methods of transplanting the spleen and attaching it to the heart were carried out.

Operative Technique

During the course of this study many modifications were made in the type of operation. It is feasible to perform this operation in its entirety through a left thoracotomy (eighth interspace) exposure. Difficulties however, are frequently encountered. The dog has a long (thirteen ribs) narrow chest. The dome of the diaphragm is at a considerable distance from the heart. The dog's spleen is enormously enlarged, and mobilization of this organ through an opening in the diaphragm is often difficult. Therefore our latest technique consists of an abdominal and a thoracic approach. The former to mobilize the spleen; the latter to attach it to the heart.

The animals are anesthetized with intravenous Nembutal, and this is followed with the insertion of an intratracheal catheter; the latter is connected to an Emerson resuscitator, using fifty per cent oxygen.

A mid-line upper abdominal incision is made from the ensiform cartilage to the umbilicus. The

continued on next page

spleen is readily delivered into the wound. Mobilization is performed by separating the spleen from the stomach by segmentally clamping and ligating the vasae breviae, and the left gastro-epiploic vessels. The pole of the spleen best suited for approximation to the heart is selected. A sub-total splenectomy is performed, sacrificing the other three-fourths of the spleen. This is easily performed by dividing and ligating the mesentery to the spleen. The cut end of the splenic residue is then closed with a continuous mattress suture. In no instance has there been bleeding from the splenic stump.

The chest is opened through an incision in the seventh interspace. A hand is placed within the peritoneal cavity, and pushed up against the diaphragm, thus determining the most propitious site for incision into the diaphragm. A relatively small incision is made in the diaphragm, and the spleen is delivered into the chest. The opening in the diaphragm is snugly closed about the vascular pedicle of the spleen. The pericardium is opened widely. Two or three mattress sutures are placed in the ventricles. The epicardium and the episplenium are then abraded with a Beck type of rasp, and also with emery cloth.

The mattress sutures previously placed in the heart are re-threaded and are brought through the spleen. The latter is pushed down on the heart, and the sutures are tied over a long cylinder of free omentum, one end of which had been previously placed as a loose halter below the spleen, the other end being anchored to the apex of the pericardial wound. The pericardium is carefully closed with a continuous suture, making additional use of the piece of omentum, so that there would be no undue compression of the heart. The abdominal and thoracic wounds are closed in layers.

Following operation the animals are given penicillin for three to four days. They respond very quickly after the procedure and show no signs of discomfort or shock.

Ligation of a coronary vessel is carried out after an interval of at least four weeks. The second operation is done under Nembutal anesthesia, with operative conditions as described above. The chest is re-opened and the pericardium incised. The descending branch of the left coronary is identified, and ligated close to its origin, with a linen suture. Closure of the chest is made in the same manner as in the first operation. In some animals the right coronary, or the circumflex branch of the left coronary, is ligated at a subsequent operation.

Results

In all, thirty dogs came to a second operation. In each of these the descending branch of the left coronary was ligated without any observable change in the rate, force or rhythm of the heart. In twelve of these animals the right coronary was ligated a month or more later, without any fatality. In four animals the circumflex branch of the left coronary was ligated subsequent to the ligation of the left descending branch. Electrocardiograms were done on some of the animals at the time of operation or at a later date. These showed evidence of a coronary infarct, although the dogs behaved normally in every way. The animals were sacrificed at varying intervals, and the heart-spleen anastamosis examined grossly and histologically.

In the earlier dogs of the series the barrier effected by the epicardium and splenic capsule was not adequately removed, and a dense band of tissue prevented a true mingling of blood between the two organs. Since emery cloth has been used the epicardium is readily removed, but the splenic capsule is still troublesome and requires vigorous abrading.

Attempts to inject graphite suspensions of known particulate size, through the splenic artery, have not been uniformly successful. A technique for this procedure is being worked out.

Discussion

The results would indicate that the splenic implant produces an auxiliary blood supply sufficient to protect the heart from ventricular fibrillation, or asystole, and consequent death of the animal following ligation of coronary vessels. The findings of Beck and his group[16, 17] would seem to have established beyond a reasonable doubt that seventy per cent of normal dogs die following the ligation of the descending branch of the left coronary artery. Key[1] and many others, have reported identical figures. The fact that no deaths occurred in this small series would seem to be significant. The more so in that the right coronary, or circumflex, was also successfully ligated in a number of animals.

There is one factor which might lead to a different interpretation of these results. Blumgart et al[18] and Schlesinger[19] have pointed out that the dog's heart has very rich anastamoses, between the coronary vessels, and that consequently the dog is not too suitable an animal for experiments of this nature. Their description is borne out in a paper by Piannette[20] who used the Schlesinger[21] technique.

Along the same line a recent publication by Chardack, Bolgan, Olson, Gage and Farsworth[22] challenges the use of the ligation of the descending branch of the left coronary artery as a criterion of suitability of revascularization of the heart. They found in a small series of dogs that only nine per cent of the animals died as the aftermath of this occlusion. Experiments by us are now in progress to reinvestigate this situation.

Regardless of the ultimate outcome of all of the experimental work which has been done on the revascularization of the heart, anyone who has had experience with the problem finds it difficult to

avoid concluding that the surgical approach has more to offer than purely medical treatment at the present state of our knowledge. The writers do not maintain that the technique suggested here is the ideal one, but insofar as can be discovered from the literature, this is the first time the possibility of using the spleen in this role has been seriously suggested. Beck[23] in a review article mentions the spleen in passing, but has never published any experimental data.

SUMMARY

I. A technique has been presented for anastamosing the spleen to the heart of the dog.

II. The animals have survived acute coronary occlusions.

III. It is suggested that this operation may be feasible in the human, suffering from coronary insufficiency.

BIBLIOGRAPHY

[1]Key, James A.; Kergin, Frederick G.; Martineau, Y'Ves; and Leckey, R. G.: A Method Of Supplementing The Coronary Circulation By A Jejunal Pedicle Graft. J. Thor. Surg. 28:320-330, 1954

[2]Adams, Ralph: Surgical Treatment Of Coronary Insufficiency. Boston Medical Quarterly. 5:97-104, 1954

[3]von Wedal, J.; Lord, Jere W.; Neumann, Charles G.; Hinton, J. William; Revascularization Of The Heart By Pedicled Skin Flap. Surg. 37:32-53, 1955

[4]Beck, C. S.: The Development Of A New Blood Supply To The Heart By Operation. Ann. Surg. 102:801-813, 1935

[5]O'Shaughnessy, L.: An Experimental Method Of Providing A Collateral Circulation To The Heart. Brit. J. Surg. 23:665-670, 1936

[6]Carter, B. N.; Gall, E. A.; and Wadsworth, C. L.: An Experimental Study Of Collateral Circulation Produced By Cardiopneumopexy. Surg. 25:489-509, 1949

[7]Vineberg, A. M.: Treatment Of Coronary Artery Insufficency By Implantation Of The Internal Mammary Artery Into The Left Ventricular Myocardium. J. Thor. Surg. 23:45-54, 1952

[8]Moran, R. E.; Neumann, C. G.; von Wedal, J.; Lord, J. W.; Stone, P. W.; and Hinton, J. W.: Revascularization Of the Heart By Tubed Pedicled Graft of Skin And Subcutaneous Tissue. Plast. and Reconstruct. Surg. 10:295-302, 1952

[9]Beck, C. S.; Tichy, V. L.; and Moritz, A. R.: The Production Of A Collateral Circulation To The Heart: An Experimental Study. Am. Heart J. 10:849-873, 1935

[10]Thompson, S. A.; and Raisbeck, M. J.: Cardiopericartiopexy; The Surgical Treatment Of Coronary Arterial Disease By The Establishment Of Adhesive Pericarditis. Ann. Int. Med. 16:495-520, 1942

[11]Harken, Dwight E.; Black, Harrison; Dickson, James F. III; Wilson, Hugh E. III: De-Epicardialization: A Simple, Effective Treatment For Angina Pectoris. Circulation XII #6,955-962, 1955

[12]Heinbecker, P.; and Barton, W. A.: Operation For Development Of Collateral Circulation To The Heart. J. Thor. Surg. 9:431-438, 1939

[13]Thompson, S. A.; and Plachta, A.: Fourteen Years' Experience With Cardiopexy In Treatment Of Coronary Artery Disease. J. Thor. Surg. 27:64-72, 1954

[14]Dack, S.; and Gorelik, A. N.: Cardio-Pericardiopexy For The Treatment Of Coronary Heart Disease. Am. Heart J. 45:772-, 1953

[15]Gross, L.; Blum, L.; and Silverman, G.: Experimental Attempts To Increase Blood Supply To The Dog's Heart By Means Of Coronary Sinus Occlusion. J. Exper. Med. 65:91-108, 1937

[16]Beck, C. S.; Stanton, E.; Batiuchok, W.; and Leiter, E.: Revascularization Of Heart By Graft Of Systemic Artery Into Coronary Sinus. J.A.M.A. 137:436-442, 1948

[17]Beck, C. S.: Revascularization Of Heart. Ann. Surg. 128:854-864, 1948

[18]Blumgart, Herrman L.; Zoll, Paul M.; Freedberg, A. Stone; and Gilligan, Rourke, D.: The Experimental Production Of Intercoronary Anastomoses And Their Functional Significance. Circulation I:10-27, 1950

[19]Schlesinger, Monroe J.: Relation Of Anatomic Pattern To Pathologic Conditions Of The Coronary Arteries. Arch. Path. 30:403-415, 1940

[20]Piannette, M. Besso: The Coronary Arteries Of The Dog. Am. Heart J. 18:403-410, 1939

[21]Schlesinger, Monroe J.: An Injection Plus Dissection Study Of Coronary Artery Occlusions And Anastomoses. Am. Heart J. 15:528-568, 1938

[22]Chardack, W. M.; Bolgan, F. J.; Olson, K. C.; Gage, A. A.; and Farsworth, W. E.: The Mortality Following Ligation Of The Anterior Descending Branch Of The Left Coronary Artery In Dogs. Univ. of Buffalo and V. A. Hosp., Buffalo. Ann. Of Surg. 141:443-450, 1955

[23]Beck, C. S.: The Coronary Operation. Am. Heart J. 22:539-544, 1941

CANCER STUDY SCHEDULED

EDWARD A. MCLAUGHLIN, M.D., *director of Health*, has been notified that the Surgeon General, upon recommendation of the National Advisory Cancer Council, has approved the State Health Department's application for a Field Investigation grant.

As proposed, the Field Investigation will involve the microscopic examination of body cells in an attempt to find cancer of the uterus in an early highly curable stage.

Since this microscopic examination requires the use of laboratory technicians who have had specialized training, much of the first part of the study will be devoted to recruitment and training of personnel. It is estimated that several months will elapse before the Field Investigation unit is in full operation with the actual collection and examination of specimens.

When the unit is ready, all physicians in the state will be urged to secure specimens from their female patients and to send these specimens to a central laboratory for diagnosis. There will be no fee for this examination and all suspicious findings will be reported directly to the private physician. In addition, the service to be provided by the investigation unit will not duplicate nor take the place of any existing service.

While a number of similar Field Investigations are being established throughout the country, Rhode Island will have the only one in the New England area. Since the Rhode Island Field Investigation will be carried on with no medical school affiliation, the experience here may indicate whether similar studies can be set up in other sections of the country that are removed from medical school facilities.

INFANTILE ECZEMA

WILLIAM P. BUFFUM, M.D.

The Author. *William P. Buffum, M.D., of Providence, Rhode Island. Chairman, Subspecialty Board of Allergy, American Board of Pediatrics; Vice President, American Academy of Allergy.*

MY PRESENTATION will be limited to atopic dermatitis in infancy, or infantile allergic eczema, and I shall call this just "eczema."

There is much about eczema that we do not understand, and we do not accomplish as much as we ought to by the allergic approach. Dermatologic treatment with medication seems to be fully as important, and in many cases seems to be the only treatment that helps. I am going to talk about eczema from the allergic or immunologic angle with full appreciation that this is only half the story.

First we must establish the diagnosis. This is usually not very difficult. If the dermatitis starts some time after two months, if it occurs mainly on the cheeks and the extremities, if the edges are not clear-cut but fade out gradually, and if it by itching makes the baby very unhappy and restless, it is almost surely eczema. On the contrary seborrhoea occurs mainly on the scalp and trunk; it may begin and usually does before two months; the edges are sharp and well defined, and it hardly itches at all. This differential diagnosis is important, because seborrhoea can usually be cured rapidly by medication, and often has no relation to allergy.

The history is not so instructive as it is in asthma, but it is of value both in clinching the diagnosis and sometimes in finding the specific cause. The family history is interesting; a strong inheritance, especially from both sides of the family, is of prognostic importance, especially for future respiratory allergies.

The skin tests by scratch more often than not show positive tests. The positive egg test is much the most common and other positive tests are fairly frequent. This is in definite contrast to asthma at the same age, in which the tests are usually negative. The positive tests in eczema of infancy are usually not related to any clinical symptoms.

The intracutaneous tests are more sensitive but I rarely do them on these babies. Why not?

The skin tests are usually not of great value, but occasionally they give real help. Positive tests may strengthen our diagnosis of eczema; as a positive scratch test is almost diagnostic of the allergic state. We may pick up some valuable information as to the specific sensitivity; a positive test to milk is probably significant, and a positive test to wheat or orange is definitely interesting. The tests are of prognostic import; a patient with several strongly positive tests is often in for trouble, not only with the eczema, but also later with respiratory disease.

In the majority of these babies, clinical allergies for foods can be demonstrated. The baby is kept for three weeks or so on a diet without milk, wheat, egg, orange juice, peas, or orange juice. Then the above foods are added to the diet one at a time at four-day intervals. If the food is a factor in the dermatitis, there will be a flare-up when the food is added. The food is not added to the diet, or is added cautiously, if there is reason to think that it will make the eczema much worse.

If the baby is clinically sensitive to milk, it is now relatively simple to feed him without milk, we have the soy bean preparation, Nutramigen, and recently the meat base formulas. I have used most frequently the soy bean preparations. Also frequently evaporated milk works very well, probably because the lactalbumin is well precipitated and is not absorbed unchanged.

It is very striking that even with the most painstaking study and treatment, babies with eczema do not clear up or even improve as rapidly as one would expect them to. There is evidently some tendency or cause that is not known.

Some very interesting work has been done by Storck[1] in Zurich, showing that in some eczema, at least, there is an infectious factor which has been hitherto ignored. Although as far as I know, none of this work was done on babies, it may partly explain some of our poor results. Storck has shown that in some eczemas there is a marked increase of staphylococcus aureus and to a lesser degree hemolytic streptococcus in the eczematous areas. He has also demonstrated that in these same patients positive patch tests can be obtained to these bacteria. These experiments were carefully controlled, and showed apparently that there was an altered reaction to the bacteria or their products.

In treating patients we should plan the treatment to take care of the infectious element of the disease.

My first ointment is always an antiseptic one, usually Vioform. Often it is a good plan to start with an oral antibiotic.

There is one aspect of atopic dermatitis that has not been sufficiently emphasized. About one third of the asthmatic children have had eczema; and probably about one third of the babies with eczema develop asthma later on. What is more important is that the worst cases of asthma usually occur in children that had had eczema. For instance, I picked the records of twenty-five patients with severe asthma and found that twenty of them had had eczema, and I believe that this proportion will be found in a study of a larger number of cases. Ratner[2] has studied a large number of these cases and reported his findings under the heading of *The Dermal-Respiratory Allergic Syndrome.*

The significance of this is that we must be conscious of impending asthma in these babies and treat them accordingly. The least we can do is to eliminate as far as we can the sources of inhalant sensitivity, such as animals, feather pillows, uncovered kapok mattresses, woolen blankets, stuffed or hairy toys, woolen rugs, etc. The diet should not contain foods to which the patient is sensitive.

Asthma must be treated adequately when it first appears. It is not permissible to call it "asthmatic bronchitis" for the first year or two and let it go without treatment. With proper care we ought to be able to prevent the development of severe asthma.

In conclusion, it should be said again that the immunologic approach alone is not the proper way to treat eczema in infancy. The medication of the skin, the protection from scratching and other details are more important in giving immediate relief. The methods of allergy are also desirable, especially for the prevention of respiratory allergic disease.

[1]*The Eczemas,* L. J. A. Loewenthal, Williams, Wilkins & Company, Baltimore. Chapter 7 by H. Storck

[2]*Allergic Dermal-Respiratory Syndrome in Children,* B. Ratner, C. Collins-Williams and S. Antracht. A. J. Dis. Child. 82:666, December 1951.

POSTOPERATIVE SHOCK FOLLOWING CORTISONE TREATMENT

continued from page 194

buffalo hump, hirsutism, etc., where reasonable salt restriction twenty-four hours preoperatively and twenty-four to forty-eight hours postoperatively appears indicated. Cope and Raker[8] report that greater derangement of sodium metabolism in Cushing's Disease was expected than encountered. Normal range and amount of sodium space by means of radioactive sodium before and after adrenalectomy with correction of the disease were found. These findings apparently give some latitude in the salt restriction management.

"Although corticotropin (ACTH) is useful in re-establishing adrenal responsiveness after exogenous cortisone, its effect is gradual (3-5 days or more) so that this mechanism cannot be depended upon where immediate delivery of adrenal hormone is required."[7]

Adrenal failure as evidenced by lack of eosinopenia and intractable hypotension may supervene occasionally in the postoperative patient without known adrenal deficiency. Intravenous hydrocortisone is invaluable in restoring immediately circulating hormone and consequent restoration of blood pressure. Black and Harken[9] have used it successfully in shock in patients having undergone cardiac surgery.

VI. Summary

A case of adrenal cortical insufficiency from the Rhode Island Hospital is presented. A survey of the literature reveals at least four previously reported papers dealing with the same problem. This case appears to have had the longest interval between cessation of treatment and shock following a surgical procedure so far reported. A review of the history, physiology—normal and pathologic—has been presented. Preoperative and postoperative care has been discussed.

This postoperative morbidity syndrome is iatrogenic in origin and hence preventable. It would appear to be a moral obligation of the physician treating a patient with hypophyseal or cortical steroids to acquaint the patient with the possible problems arising from the use of the drug. We strongly urge that the patient be told that in the event of severe stress arising such as surgery, he should inform the surgeon of such treatment accordingly.

In general, all patients who have had prior steroid therapy, whether treated prophylactically or not, should be observed with great care so as to avoid postoperative adrenal cortical insufficiency if possible and to treat it promptly in those few instances in which it is encountered.

REFERENCES

[1]Rhode Island Hospital Case History No. 551652

[2]Goodman and Gilman: Adrenocorticotropic Hormone and Adrenocortical Steroids, Pharmacological Basis of Therapeutics, 2nd Ed., 1642-1691, 1955

[3]Lewis, L.; Robinson, R. F.; Yee, J.; Hacker, L. A.; and Eesen, G.: Fatal Adrenal Cortical Insufficiency Precipitated by Surgery during Prolonged Continuous Cortisone Treatment, Ann. Int. Med., 39:116, 1953

[4]Salassa, R. M.; Bennett, W. A.; Keating, F. R., Jr.; and Sprague, R. G.: Postoperative Adrenal Cortical Insufficiency, J.A.M.A., 152:1509, 1953

[5]Harnagel, E. E.; and Kramer, W. G.: Severe Adrenocortical Insufficiency Following Joint Manipulation, J.A.M.A., 158:1518, 1955

[6]Lundy, J. S.: On the Present-Day Therapy of Shock for Surgical Patients, Proc. Staff Meetings Mayo Clinic, 30:446, 1955

concluded on page 202

HEALTH EDUCATION AND MEDICAL RESEARCH*

HONORABLE JOHN E. FOGARTY, M.C., *Member of Congress, Second Rhode Island District*

I AM NOT a health educator. I have never done any medical research. It therefore would be inappropriate for me to attempt to define either health education or medical research in the presence of a group which includes professionals in both fields. It would be even more inappropriate for me to make suggestions as to how I think either one should be conducted.

However, particularly during the past fifteen years, I have had a great interest in both medical research and health education. It has become necessary for me to know something about both in the course of my work. I have been privileged to be a member of a congressional committee which has had the responsibility of providing appropriations totaling hundreds of millions of dollars for medical research and health activities.

My qualifications to speak to you on these subjects, then, are those of a relatively well-informed layman, a legislator, and a citizen who has the same stake in medical research and health education as have all of our 165 million citizens. In this sense, I can give you the "practical" working views of a legislator and a citizen who may be regarded as more or less typical of the public as a whole.

The public has great faith in medical research. And so the public supports medical research, to the extent of millions of dollars each year, given directly to voluntary health organizations, or appropriated from public funds raised by taxes. The public encourages medical research, and sometimes attempts to push it farther and faster than research itself can go. New ways to prevent disease, to cure disease, and to prolong life are the final payoff of medical research, and the results are what the public understandably and properly expects from medical research. Each new discovery is greeted with public acclaim, followed by expectations of even greater and more difficult achievements.

The hypothetical average man does not see the part of the research iceberg that is under water—the long, patient search for basic knowledge, the slow accumulation of facts, the rigorous training process, the interdependence of the sciences, and the interweaving of research and higher education. All of these underlying factors that are taken for granted by scientists and educators are understandably of little or no concern to the average person.

The average practical man in the United States has a faith in education more deep-rooted and possibly even stronger than his faith in medical research, and he makes demands upon education as great as, or even greater than his demands upon research. Our average practical man has little technical knowledge of health education as known to professional health educators. He may not even be familiar with the term itself. But he has at least an unformulated awareness of it in which are blended many of his feelings and ideas about both health and education. This combination carries with it faith, expectations, and demands which are tremendous.

Once some new information has been produced by research and translated into usable medical knowledge by way of clinical investigation, all the good things that follow from there on are the result of a number of processes which our practical citizen is likely to look upon collectively as health education. This very simplified concept would see all medical education, professional education, health department activity and the work of the professional health educator as parts of health education. The practical man, holding these simple views, is probably no more concerned with the views of professional health educators on the meaning of health education than with the views of research workers on the meaning of research. Results are what he expects from both groups, and the process by which results are achieved is secondary to him.

These over-simplified views of the ordinary citizen have a certain basis in reality. During recent years the public has seen millions of dollars invested in medical research. They have seen results come from research which have made possible great advances in individual and public health—advances which understandably have led to the popular use of such words as "wonder drugs" and "miracle drugs." They have seen vast nation-wide campaigns which have saved thousands of lives . . . not just abstract statistical lives, but the lives often

*Presented at the Testimonial Luncheon Meeting in honor of Ira V. Hiscock, Sc.D., president of the American Public Health Association, held by the New England Health Education Association, at the Sheraton-Plaza Hotel, Boston, Massachusetts, December 2, 1955.

of members of their own families, or of their neighbors.

For example: during the past fifteen years I have watched research, health education, and medical and public health practice make phenomenal gains over two dreaded diseases, syphilis and tuberculosis. These changes have been so far-reaching that they have profoundly affected the health profile of our country. And today the entire world is watching as though from the sidelines of a football game or from seats in a theater, each dramatic development that appears to be leading rapidly toward the control of another much-feared disease, poliomyelitis. The average citizen sees this simply as another new weapon against disease, produced by medical research, and widely applied through familiar public health methods which he associates with health education.

Less dramatic, less widely known as yet, is the potential control of rheumatic fever and rheumatic heart disease. But already the public is becoming aware of the fact that rheumatic fever can be prevented by the treatment and prevention of streptococcal infections. Research has provided the information, health education is spreading it and achieving its application.

The public is also aware of recent discoveries of drugs that have had extraordinary effects, occasionally dramatic, on some patients with mental illness. This they accept as another result of research, and they are confident that research will pursue these new clues or as yet undiscovered clues, and dig out information which will lead to more and better control of mental illness.

The public further is aware that medical research has made at least small scratches on the hard surface of the problem of cancer; the public is confident that research ultimately will find more useful facts about the cause of cancer, its prevention, and its cure. The public is equally confident that health education will keep all of the people informed of the progress and will bring them the ultimate application of this information by way of the medical profession, health departments, and all of the other health education processes whereby research discoveries become daily health realities.

Similarly, the public realizes that arteriosclerosis, the disease which causes more deaths than any other, can be controlled only when research has found answers to the questions of cause and prevention, and when such answers have been made widely known.

These ideas of medical research and health education may be over-simplified and over-optimistic. But whether they are or not, I believe they represent the ideas of the great bulk of our population. They exist partly because they express the wishes and hopes of the people, partly because of what medical research has done for them in the past, and partly because of what health education has taught them to believe.

If, for sake of definition, we accept the fact that health education is all of the processes of communication, individual and collective, by which research is transformed into improved public health, it becomes crystal clear that health education is an integral part of medicine itself, and that the physician is the keystone. He is the most eloquent and persuasive of all health educators, as he pursues his task of helping people achieve health and prevent disease.

Nonetheless, the physician should be—and, I imagine, is—the first to emphasize the essentiality of his professional colleagues — the nurse, the health educator, the social workers.

There is another relationship which should be explored—that between health education and medical research. Just as the physician and the health educator are allies, so it is—or should be—with the scientist and the health educator.

The scientist publishes findings in professional journals or at professional meetings. The scientific world seizes his findings, digests, evaluates and verifies them, using them in large measure for further research. This is as it should be. But gradually from research emerges a technique, a drug, a treatment which is ready to move into clinical trial and finally to general use. It is here, as I understand it, that health education moves to the forefront, for communication becomes the essential ingredient in this transition. The knowledge yielded by research must be communicated to the professional world, and to the general public, and everyone in the total spectrum of the health profession bears a share of the obligation to conduct this educational program successfully.

I promised earlier that I would resist any inclination I might feel to comment on matters of professional judgment in your field.

May I make one partial exception to that? There is one particular thing which I feel very strongly and deeply, and I would like to share it with you.

It has to do with the pace at which knowledge that can be applied is increasing.

You know, as I do, that medical research is continuing to provide new and significant data about health and disease. Since the war, the volume of medical research in this country has increased about fivefold as we have begun to face up to some of the issues posed by chronic illness. And facts are beginning to become available—bits and pieces of information that are not answers, in themselves, but that suggest with a high degree of certainty that answers will be forthcoming.

This means that the health education burden will continue to grow in size and importance. Already

concluded on next page

POLIO VACCINE IN RHODE ISLAND

(As of April 14)

With increasing pressure being brought to bear by patients and physicians for second and third polio "shots," it seems necessary to outline the position of the Poliomyelitis Vaccine Program in Rhode Island.

We have not been able to obtain definite promises regarding the availability of the Salk-Enders vaccine for any time in the future. Marion Folsom, secretary of Health, Education and Welfare, indicated this month that even he doesn't know what future supplies will be available.

We do have reason to believe that there will be increasing amounts for Rhode Island over the next months, but it is likely that enough for second "shots" may not be on hand until summer, or even fall. At the moment we are concentrating on giving first inoculations to all eligible children from six months through fourteen years. We anticipate that the next step will be the raising of the age limit to nineteen years.

Information at hand indicates that it probably makes little difference if the interval between the first and the second injection is up to six to twelve months. "In fact, longer intervals seem to be advantageous. Therefore the second dose may be given at any time without losing the benefit of the first dose," according to a recent letter from the medical director of the National Foundation for Infantile Paralysis.

We, as physicians, must reassure the public that experience has shown that one dose gives a fairly high level of protection. The Massachusetts polio experience of 1955 showed that one injection of polio vaccine was 60% effective against paralytic poliomyelitis. Evaluation of reports from thirty state health departments following the 1955 program indicates that there was about 79% effectiveness of the program, even though three injections had *not* been given. These reports compared experiences among 5,200,000 non-vaccinated and 4,800,000 vaccinated children most of whom had received *only one dose* of vaccine.

It would appear then, that we are justified in presenting to the public our feeling that they may have to be satisfied with only one injection before the summer, and that one inoculation does give protection.

JOHN T. BARRETT, M.D., *Chairman*
Child and School Health Committee
and
Chairman, State Advisory Committee on Polio Vaccine Distribution

April 14, 1956

E. P. ANTHONY, INC.
Druggists
Wilbur E. Johnston Raymond E. Johnston
178 ANGELL STREET
PROVIDENCE, R. I.
GAspee 1-2512

we see some of the signs. There are things that can be done to treat some forms of heart disease, some tests that promise to be of value in cancer diagnosis, some drugs and techniques that are useful in the treatment of mental illness. There *are* measures to keep diabetes under control, to ease the suffering of arthritics, to improve by rehabilitation the status of the victims of various neurological disorders. Thus, in net effect, the pool of information which demands application is growing, and will continue to grow. Yet already, it would appear, the demands on health education are great . . . perhaps, in part, because it can never be assumed that any problem in education can become a closed book. The lessons have to be repeated over and over again, in different ways for different audiences, in order to keep the message alive.

In this, it seems to me, lies the great challenge to all of us whose mission in whole or in part is better health for more people. It is to find ways to strengthen health education in all of its forms and for all of its audiences, so that instead of falling behind in the race between knowledge and application, we can progressively narrow the gap, so that ultimately there will be a minimum of lag in the broad application of health measures.

This challenge, if it is to be met, imposes obligations on all of our society. It is meetings such as this which give one faith that the challenge can and will be met. And if the breadth and the extent of the problems seem enormous, it must be remembered that both our resources and our resourcefulness are great.

If we look at it as a chemical reaction, with research fed into the process and with health as the end product, we can see that health education is the catalyst, the force without which the reaction will not take place. The catalyst will work only if each group, and each individual within each group, does a share of the job carefully and well, and in complete harmony with all others of common purpose.

POSTOPERATIVE SHOCK FOLLOWING CORTISONE TREATMENT

concluded from page 199

[7]Scope: Acute Hypo-Adrenalism and Intravenous Hydrocortisone, 4:19, 1955

[8]Cope and Raker: Cushing's Disease: The Surgical Experience in the Care of 46 Cases, New England J. Med., 253:119, 1955

[9]Scope: *ibid.*

Patronize Journal Advertisers

The RHODE ISLAND MEDICAL JOURNAL

Owned and Published Monthly by the Rhode Island Medical Society
106 Francis Street, Providence, Rhode Island

EDITORIAL BOARD

PETER PINEO CHASE, M.D., *Editor-in-Chief*, 122 Waterman Street, Providence
JOHN E. FARRELL, *Managing Editor*, 106 Francis Street, Providence

CHARLES J. ASHWORTH, M.D.*
ALEX M. BURGESS, M.D.
JOHN E. DONLEY, M.D.*
IRVING A. BECK, M.D.
CHARLES L. FARRELL, M.D.
MARSHALL FULTON, M.D.
PETER F. HARRINGTON, M.D.
ERWIN O. HIRSCH, M.D.
HENRI E. GAUTHIER, M.D.
HENRY E. UTTER, M.D.
SEEBERT J. GOLDOWSKY, M.D.

COMMITTEE ON PUBLICATION

(Members in addition to those marked above with asterisk)*

HERBERT FANGER, M.D., *of Providence*
WILLIAM J. MACDONALD, M.D., *of Providence*
FRANCIS P. VOSE, M.D., *of Woonsocket*
EARL J. MARA, M.D., *of Pawtucket*
ROBERT W. RIEMER, M.D., *of Providence*
VINCENT I. MACANDREW, M.D., *of Providence*

THANKS, MR. EISENHOWER!

THERE IS LITTLE doubt that the attitude of the public toward President Eisenhower's health is dictated by political prejudices. The democrats are extremely solicitous and feel that the poor man should be placed on a sofa or at least in an easy chair and protected from the rough dangers of the world. The republicans, on the other hand, have all the carefree optimism of the average motorist passing a blind city corner at forty miles an hour. But whichever side is correct in its views, and of course neither is, this controversy illustrates the changed attitude which developed in one generation toward that most necessary of all machines, the human heart.

In the past many a youngster has had his life much restricted because some physician with sharp ears and dull wits heard a "heart murmur." The blood as it courses swiftly through the heart has to get past partially obstructing valve leaflets and turn corners. Why should it not babble like Tennyson's Brook?

A well-known surgeon in town apparently had a heart attack. For the remaining twenty years or so of his life he would not climb a flight of stairs although some programs for rehabilitating poor hearts have utilized stairs. Many other examples could be brought forward to show that not too long ago a diagnosis of heart disease was, if not synonymous with a death sentence, at least a notice that the patient must lead the life of a valetudinarian.

Certainly it would have been inconceivable in the old days that a man would offer himself as a candidate for a hard job did his prospective employers know of such a "handicap." But tremendous advances have taken place because of the devoted, brilliant work of the medical profession. Whether or not President Eisenhower will or should be re-elected, we thank him for the great compliment he has given to our profession.

145th MEETING

On May 1, 2 and 3 the Rhode Island Medical Society, one of the oldest state organizations in the nation, will conduct its 145th annual meeting. The pattern may be somewhat similar in many respects with those of recent years, but the wealth of clinical information that is to be presented by outstanding physicians indicates anew the ever changing picture of modern medicine.

For the busy doctor the state society meeting offers a truly remarkable opportunity to attend a postgraduate course in medicine in three days right

continued on next page

in his home area. No long travel, no overnight absences from his practice, and no extra expense is involved. Here is a chance for every doctor, regardless of how busy he may be, to hear what's new in medicine and surgery, and to hear it under ideal conditions in his own state medical library.

The committee on arrangements for the scientific program has developed an interesting series of lectures. This year the Rhode Island Chapter, American Academy of General Practice, has added its meeting to that of the Society's, and the addition is a welcome one.

It's annual meeting time. *Don't miss it!*

CANCER SOCIETY'S GOOD JOB

The Rhode Island Medical Society has just run its eighth Annual Cancer Conference for Physicians and everybody was greatly pleased with it, as an unusually clever group of New York physicians presented able and interesting papers. Medicine nowadays is carved into a large number of varying-sized pieces and undoubtedly cancer is one of the larger segments.

The American Cancer Society is trying hard to educate, not only the lay public, but the physicians as well, for there is no more complicated problem that we physicians have than cancer, and from necessity a good many of us are not too intimately acquainted with all the details.

In presenting such reports to the medical profession it is not necessary to pull punches much. Long association with the grimmest details of disease have got us to the point where we can take them without wincing. We need no psychotherapy to enable us to do this.

The situation is decidedly different when the Cancer Society proceeds to instruct the lay public. The lay public may react in many strange ways. If the worst aspects of cancer and the worst prognostications are presented to them, the result may be that they will stay away from the medical profession. They have not the fortitude to face the naked truth. On the other hand, the human body has many blemishes, abnormal growths, as well as symptoms, which are altogether too easily misinterpreted by the lay public as point to cancer.

This is what makes cancer quackery an easy and lucrative job for people without conscience. The person who is glad to see his name in print extolling the remarkable cure that has been made on him has only the word of an absolutely unreliable treater without bowels of mercy to show that he had any cancer in the beginning. The great proportion of cancers can be so handled that there is a temporary good effect even when the ultimate outcome is hopeless. Follow-ups of the printed testimonials to cures show that a goodly proportion of the cases of those testifying have gone on to death even before their testimonials have gotten to print.

Now all this presents difficult problems to the Cancer Society. It is important that they get the public to the physicians quickly while there is some hope of cure. Not quite so important, but still much to be desired, is the avoidance of cancerphobia. Of course, this is the one point where the Cancer Society is most open to criticism. It is easier to criticize them than to tell them how to avoid this situation. We are inclined to think that on the whole they are doing a good job and they merit the support of all of us physicians.

A.M.A. DUES

The dues of the American Medical Association are assessed eligible members in good standing of the constituent state medical associations. As a result the billing is made for the A.M.A. by the state society merely as an aid to the national organization.

In Rhode Island we make one billing to all members of the Society to notify them of their A.M.A. dues. This assessment must be paid by *June first* for a member to retain his active status in the A.M.A. The state society dues, on the other hand, can be paid within the calendar year. This difference has created many misunderstandings with individual physicians who have failed to read their bills carefully. Therefore this notice is given to all members of the Society that if they have not as yet paid their A.M.A. dues they should do so within the next month.

And in that connection it should be remembered that your state and district societies operate solely on the income from dues, and their nominal assessments should be given priority by every physician. Your medical societies have one major purpose—to aid you in your practice of medicine. Do your part in the matter of dues by paying the bills promptly.

BUTLER HOSPITAL

This old and honored institution has apparently now received a new lease of life. The new officers and Trustees represent a good cross-section of the modern population and their numbers have been increased, the present Board being made up of eight of the original members and eight newly elected. The newspapers correctly dubbed this *A Compromise Board*.

It is pleasant to record that the proceedings went along in an harmonious manner; although one woman stated that she was "amazed" that there was neither a woman nor a physician among the nominees. Amaze has a number of meanings and the first one, not obsolete, is "to overwhelm with bewildered wonder." We doubt if she really felt that way. The dead hand of English common law has long pressed heavy on woman, and its side effects are great. For some strange reason this pressure has not reached out to Maude Street

where brilliant women Trustees have helped to make the Providence Lying-In Hospital one of the outstanding institutions of the country. Perhaps Doctor Hildegard Durfee was appeased by the expressed hope that "the new Board will take up the question of integration of the distaff side."

As for Doctor Durfee's second wish, or vague hope, or longing that a medical man should be one of the Trustees: A writer of a letter to the editor of the local newspaper says, "My dictionary defines Trustee as 'a person holding property in trust.'" Had he looked carefully into Webster he would have found this to be a secondary legal definition. The first primary one is: "A person regarded with trust or to whom something is entrusted." What greater trust could a hospital have than the health of its patients? Should not medical men have a primary position here equal to that of lawyers and prominent business men?

We are glad that Butler Hospital is not moribund. An aroused public opinion is greatly interested in its resuscitation. A group of public spirited men are actively interested in its first aid.

Godspeed to them.

PUBLIC SUPPORT NEEDED

Since its founding in 1949, the National Fund for Medical Education has concentrated almost wholly on obtaining corporation support for the nation's medical schools. Progress has been slow but steady. Each year has seen an increase over the previous one, both in the number and amounts of company contributions. In 1955 more than 1,500 business firms contributed nearly $1,700,000.

It is, of course, a long way from the $10 million additional annual income required by the schools. But it has shown us what is necessary to win corporation support: a painstaking—and persistent—campaign of education to show business leaders their stake in medical education.

The encouraging part of the picture is the readiness of business leaders to support medical education "once they know the facts." As Colby M. Chester, chairman of the Fund's Committee of American Industry, once said: "If we can get them to sit still long enough to listen, we can get their support."

That is the problem. And it brings to mind the happy thought that nowhere is a businessman more approachable, or more likely to "sit still," than in a discussion with his doctor.

It is not suggested that physicians badger their patients for contributions to the Fund. But doctors can be a great ally of the Fund in bringing, in some way, the needs of the medical schools to the attention of the businessmen among their acquaintances. Certainly no one is better qualified to speak authoritatively than doctors. And no one could be more convincing.

Medical Education Week provides an excellent occasion for beginning such an approach. It will be a period when the needs of the medical schools, as well as the achievements of medical science, will be discussed at meetings businessmen attend and in publications they read. Perhaps then, too, the approach can be followed up from time to time during the year.

Considering the role that the medical sciences have played in safeguarding the people's health, no one has to be timid or reluctant about broaching the subject of continued support for medical education. The testimony of the doctor, coming on the heels of appeals by industry leaders, can do much, in my opinion, to win the businessmen over. Once they are convinced, they are likely to become regular annual contributors to the Fund.

A MEDICAL ARISTOCRAT

On the occasion of the honoring of Doctor Joseph H. Ladd, a past vice-president of the Rhode Island Medical Society and for forty-eight years the superintendent of Exeter School, Doctor John E. Donley told the Rhode Island Society of Neurology and Psychiatry that "Doctor Ladd is among the aristocrats of medicine," who without seeking wealth or fame, "dedicated their lives to the welfare of their fellow men." To these sentiments we heartily subscribe, and we feel that it is fitting that the citation of the Rhode Island General Assembly expressing the esteem of the people of this state and their gratitude to Doctor Ladd for his devotion to specialized service with the mentally retarded, should be set forth as follows:

> In 1907, the Exeter School was established. Doctor Joseph H. Ladd became its superintendent, a position he has held for nearly half a century.
>
> Now that he has decided to retire, it seems fitting that the General Assembly of the State of Rhode Island should recognize with wholehearted approval this devotion to an extraordinary duty not many of us would be qualified to assume.
>
> We fully recognize that since 1907 the world has wakened to the possibilities of new methods of alleviation and even of cure. This is true of advances in medicine and surgery, but we should remember that in that period there was one man who believed and worked indefatigably to righten the responsibilities.
>
> When Doctor Ladd at thirty-one years of age was named Superintendent, he moved with his family into a ramshackle farmhouse, the one habitable building on the six-hundred acre reservation off the South County Trail in Lafayette.

concluded on next page

He is now seventy-nine years of age. He shared the farmhouse with the school's first seven inmates and four attendants.

Doctor Ladd has dedicated his life to reminding the public of its neglect of the feeble-minded. The school has grown until today it has thirty-two buildings, nearly one thousand inmates and more than two hundred employees.

He is leaving now for essential "rest." What can the General Assembly say, we whose lives have not touched the ever-increasing problems of the mentally retarded, save to express our supreme gratitude to Doctor Joseph H. Ladd, who through half a century has fought the battle for understanding, tolerance and alleviation; now, therefore, be it

RESOLVED, That this General Assembly of the State of Rhode Island and Providence Plantations, voicing the commendation of all the citizens of this State and with their own complete approval, now express to Doctor Joseph H. Ladd, soon to retire as superintendent of the Exeter School, appreciation of his special contribution to the solution of one of our fundamental needs, far beyond the call of state employment service, because, in advance of the new thinking, *he knew* the problem of the mentally retarded was there as it had always been, and would continue to be. He did his very best, as we all know, to prepare the way for those who would later take over with more changing professional knowledge of ways and means in this challenging field of the retarded mind; and be it further

RESOLVED, That the Secretary of State be and is hereby authorized to transmit to Doctor Joseph H. Ladd, the accolade of the General Assembly for his exceedingly competent services.

"From ancient Epsom Salt to modern Prednisolone"

Duffy My Druggist

Fills Prescriptions

Plainfield St. at Laurel Hill Ave.,

Providence, R. I. TEmple 1-9649

DISABILITY FREEZE

Several hundred thousand workers are eligible to have their social security rights protected under the "disability freeze" provision of the old-age and survivors insurance program. Some of these are no doubt among your patients.

If so, you will be interested in knowing about the medical report form these patients may bring to you to fill out. The report, modeled after the standard form used by major life insurance companies for disability claims, calls for only the essential facts needed for a determination as to whether the worker is disabled within the meaning of the social security law. However, enough clinical detail must be given so that the review team in the State Division of Vocational Rehabilitation can make a sound evaluation as to the following points:

1. **What is the nature and severity of the impairment?**
2. **When did the impairment begin?**
3. **What is the prognosis of the impairment?**

For further details on the Disability Freeze, see the article in the November, 1955 issue of the RHODE ISLAND MEDICAL JOURNAL.

BOOK REVIEW

PATHOLOGY FOR THE SURGEON by William Boyd. 7th ed. W. B. Saunders Co., Phil., 1955. $12.50

After thirty years of noble service encompassing six English and three foreign editions, SURGICAL PATHOLOGY by Boyd has recently been replaced by a completely rewritten volume, baptized with a new title, PATHOLOGY FOR THE SURGEON. In the preface the author confesses that this text was designed primarily for the surgical intern and resident as a refresher in pathology examinations in surgical specialty boards. The book, therefore, stresses clinical and practical applications of disease processes and the pathophysiology of various organ lesions.

The initial eight chapters are concerned with a discussion of the general pathologic mechanisms of inflammation, gangrene, shock, etc. Among these is a novel and interesting chapter on the local and total body effects of radiation. The remaining chapters in the text follow the customary plan of regional surgical pathology, each headed by a convenient index table of contents on its lead page.

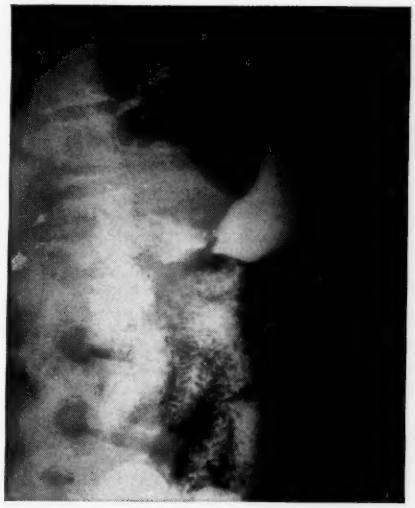
Stress is placed upon primary lesions of surgical frequency and importance. New chapters have been incorporated on wound infections, the skin, the endocrine system, and the cardiovascular system.

The fluent, pleasant and intelligible prose, typical of the author, is one of its most distinct advantages. The textbook is highly recommended for the young surgeon and surgical board aspirant.

CARMINE J. CAPALBO, M.D., *Rhode Island Hospital*

IN X-RAY VISUALIZATION

Reduced Hypermotility, Improved Delineation with Pro-Banthine®: Case History



Basic film: pronounced hypermotility of stomach and bulb; diagnosis not possible.

Five-minute film after 15 mg. of Pro-Banthine intramuscularly: large gastric ulcer on lesser curvature clearly visualized.

J. R., male, age 50, when first seen* complained of severe abdominal pain of six weeks' duration. Initial gastrointestinal roentgenologic examination revealed marked hypermotility of the stomach and duodenal bulb. Because of rapid emptying it was not possible to visualize a lesion either in the stomach or duodenal bulb. However, the patient's symptoms strongly suggested an ulcer, and he was reexamined after the injection of 15 mg. of Pro-Banthine (brand of propantheline bromide) intramuscularly. A marked diminution in motility occurred and a huge gastric ulcer was easily visible on the lesser curvature at the junction of the upper and middle third of the stomach.

This patient is now receiving 30 mg. of Pro-Banthine four times daily and gained 8 pounds during the first ten days of therapy. He was completely relieved of pain within twenty-four hours. The ulcer is presently healed and he is asymptomatic, six weeks following initiation of Pro-Banthine therapy. This is an excellent example of delineation of a lesion which escaped detection with the ordinary technique of gastrointestinal roentgenography. If an ulcer is suspected and the initial roentgenologic examination is negative or inconclusive, the roentgenographic study should be repeated following the oral administration of 30 mg. or the intramuscular injection of 15 mg. of Pro-Banthine. G. D. Searle & Co., Research in the Service of Medicine.

*Roentgenograms and case history courtesy of I. Richard Schwartz, M.D., Kings County Gastrointestinal Clinic, Brooklyn, N. Y.

Trial packages of Pro-Banthine and the new booklet, "Case Histories of Anticholinergic Action," available on request...

SEARLE

P. O. Box 5110 C
Chicago 80, Illinois

PROGRAM . . . 145th ANNUAL MEETING

RHODE ISLAND MEDICAL SOCIETY

May 1, 2, 3, 1956 — *At the Rhode Island Medical Society Library*

TUESDAY, MAY 1

Rhode Island Chapter, American Academy of General Practice

2:00 P.M. *Forum:* "HELP FOR THE HOPELESS"

Presiding: SAMUEL D. CLARK, M.D., of Bristol, Rhode Island
(President, Rhode Island Chapter, American Academy of General Practice)

2:10 P.M. "THE DOOMED INFANT AND CHILD"

CLEMENT A. SMITH, M.D., of Boston, Massachusetts

(Associate Professor of Pediatrics, Boston Lying-In Hospital and Harvard Medical School; Chief of the Infants Division, Children's Hospital, Boston)

2:30 P.M. "HE WAS IN THE PRIME OF LIFE"

EARLE M. CHAPMAN, M.D., of Boston, Massachusetts

(Assistant Professor of Clinical Medicine, Harvard Medical School; Physician at Massachusetts General Hospital, Boston)

2:50 P.M. "MAKING A GRACEFUL EXIT"

PETER PINEO CHASE, M.D., of Providence, Rhode Island

(Editor-in-Chief of the RHODE ISLAND MEDICAL JOURNAL; Past President of the Rhode Island Medical Society)

6:30-7:30 P.M. RECEPTION. Narragansett Hotel, Mezzanine

7:30 P.M. ANNUAL DINNER. Narragansett Hotel

Rhode Island Chapter, American Academy of General Practice

Address: SAMUEL D. CLARK, M.D., *President*

Business Meeting

Election of Officers

WEDNESDAY, MAY 2

Rhode Island Medical Society

1:00-1:45 P.M. REGISTRATION AND TOUR OF TECHNICAL EXHIBITS

1:45 P.M. CALL TO ORDER

GREETINGS FROM THE PRESIDENT, FRANK B. CUTTS, M.D.

2:00 P.M. "RECENT ADVANCES IN PLASTIC SURGERY"

RICHARD P. SEXTON, M.D., of Providence, Rhode Island

(Assistant Surgeon of Plastic Surgery, Rhode Island Hospital, Providence)

continued on page 210

Lift the depressed patient up to normal without fear of overstimulation . . .

with new **Ritalin®**

A HAPPY MEDIUM IN PSYCHOMOTOR STIMULATION

• *Boosts the spirits, relieves physical fatigue and mental depression . . . yet has no appreciable effect on blood pressure, pulse rate or appetite.*

Ritalin is a mild, safer central-nervous-system stimulant which gently improves mood, relieves psychogenic fatigue "without let-down or jitters . . ."[1] and counteracts oversedation caused by barbiturates, chlorpromazine, rauwolfia, and antihistamines.

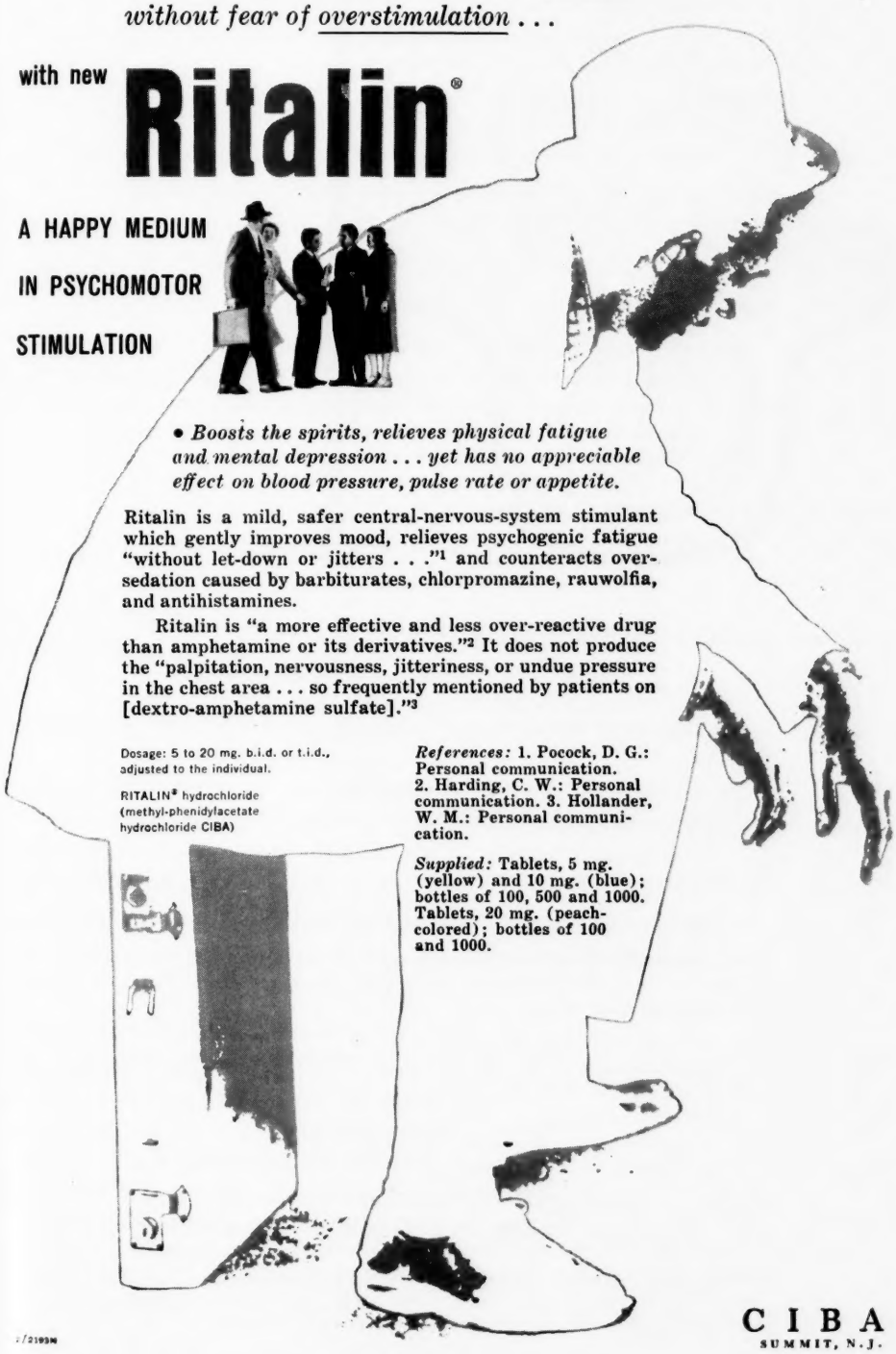
Ritalin is "a more effective and less over-reactive drug than amphetamine or its derivatives."[2] It does not produce the "palpitation, nervousness, jitteriness, or undue pressure in the chest area . . . so frequently mentioned by patients on [dextro-amphetamine sulfate]."[3]

Dosage: 5 to 20 mg. b.i.d. or t.i.d., adjusted to the individual.

RITALIN® hydrochloride (methyl-phenidylacetate hydrochloride CIBA)

References: 1. Pocock, D. G.: Personal communication. 2. Harding, C. W.: Personal communication. 3. Hollander, W. M.: Personal communication.

Supplied: Tablets, 5 mg. (yellow) and 10 mg. (blue); bottles of 100, 500 and 1000. Tablets, 20 mg. (peach-colored); bottles of 100 and 1000.



:/2193M

CIBA
SUMMIT, N.J.

2:30 P.M. "PULMONARY DISEASE AND RESPIRATORY DYSFUNCTION"

EDWARD B. D. NEUHAUSER, M.D., of Boston, Massachusetts

(Radiologist-in-Chief, Children's Medical Center, Boston; Associate Clinical Professor of Radiology, Harvard Medical School)

3:00 P.M. "CARCINOMA-IN-SITU"

BENJAMIN CASTLEMAN, M.D., of Boston, Massachusetts

(Chief of the Department of Pathology, Massachusetts General Hospital; Clinical Professor of Pathology, Harvard Medical School)

4:00 P.M. "THE RADIOIRON TURNOVER TEST IN CLINICAL MEDICINE"

(The Caleb Fiske Prize Dissertation)

R. KENNETH LOEFFLER, M.D., of Houston, Texas

(American Cancer Society Fellow, Columbia University, 1951-1952; Assistant Professor of Radiology, Baylor University, 1952-1954; Associate Professor of Radiology, Baylor University, 1954-; Consultant to the Veterans Administration Hospital, Houston, Texas)

4:30 P.M. PRESIDENTIAL ADDRESS

FRANK B. CUTTS, M.D., of Providence, Rhode Island

(President, Rhode Island Medical Society)

5:00 P.M. GENERAL SESSION OF THE SOCIETY

Installation of Officers for 1956-1957

5:30-6:30 P.M. TOUR OF THE TECHNICAL EXHIBITS

EVENING SESSION

7:30-8:30 P.M. REGISTRATION AND TOUR OF TECHNICAL EXHIBITS

8:30 P.M. "MEDICAL REHABILITATION IN A GENERAL HOSPITAL"

ARTHUR L. WATKINS, M.D., of Boston, Massachusetts

(Chief, Physical Medicine Department, Massachusetts General Hospital; Medical Director, Bay State Medical Rehabilitation Clinic; Assistant Clinical Professor of Medicine, Harvard Medical School)

9:00 P.M. "ADVANCES IN THE DIAGNOSIS AND TREATMENT OF ADRENAL DISORDERS"

(Charles V. Chapin Oration)

GEORGE W. THORN, M.D., of Boston, Massachusetts

(Hersey Professor of Medical Theory and Practice of Physic, Harvard Medical School; Physician-in-Chief, Peter Bent Brigham Hospital; Consulting Internist, Boston Psychopathic Hospital; Consultant, Children's Hospital; Consultant in Medical Research, Robert Breck Brigham Hospital; Consultant to the United States Army; Consultant to the United States Public Health Service; Chairman of the Subcommittee on Shock of the National Research Council)

10:00 P.M. RECESS AND TOUR OF TECHNICAL EXHIBITS

concluded on page 212

in arthritis
and
allied disorders...

nonhormonal anti-arthritic

BUTAZOLIDIN®

(brand of phenylbutazone)

relieves pain • improves function • resolves inflammation

Employing the serum protein-polysaccharide ratio (PR) as an objective criterion of rheumatoid activity, it has again been shown that BUTAZOLIDIN "...produces more than a simple analgesic effect in rheumatoid arthritis."[1]

Clinically, the potency of BUTAZOLIDIN is reflected in the finding that 57.6 per cent of patients with rheumatoid arthritis respond to the extent of "remission" or "major improvement."[2]

Long-term study has now shown that the failure rate with BUTAZOLIDIN in rheumatoid arthritis, and particularly in rheumatoid spondylitis, is significantly lower than with hormonal therapy.[3]

(1) Payne, R. W.; Shetlar, M. R.; Farr, C. H.; Hellbaum, A. A., and Ishmael, W. K.: J. Lab. & Clin. Med. *45*:331, 1955. (2) Bunim, J. J.; Williams, R. R., and Black, R. L.: J. Chron. Dis. *1*:168, 1955. (3) Holbrook, W. P.: M. Clin. North America *39*:405, 1955.

BUTAZOLIDIN® (brand of phenylbutazone). Red coated tablets of 100 mg.

BUTAZOLIDIN *being a potent therapeutic agent, physicians unfamiliar with its use are urged to send for literature before instituting therapy.*

GEIGY PHARMACEUTICALS Division of Geigy Chemical Corporation
220 Church Street, New York 13, N. Y.
In Canada: Geigy Pharmaceuticals, Montreal

51153

Geigy

THURSDAY, MAY 3

2:00 P.M. CALL TO ORDER

Presiding: FRANK B. CUTTS, M.D., *President*

Recognition of Delegates from other Societies

2:15 P.M. "HEMOLYSIS IN THE ANEMIAS"

FRANK H. GARDNER, M.D., of Boston, Massachusetts

(Associate in Medicine, Harvard Medical School; Associate in Medicine, Peter Bent Brigham Hospital)

2:45 P.M. "PROBLEMS IN THE TREATMENT OF ADULTS WITH PATENT DUCTUS ARTERIOSUS"

GEORGE H. HUMPHREYS II, M.D., of New York City

(Valentine Mott Professor of Surgery, College of Physicians and Surgeons, New York; Director of Surgical Services, Presbyterian Hospital)

3:15 P.M. "THE DIAGNOSIS OF ATRIAL SEPTAL DEFECT AND THE OPERATIVE RESULT"

S. GILBERT BLOUNT, JR., M.D., of Denver, Colorado

(Associate Professor of Medicine, Chief of the Division of Cardiology, Director of the Cardio-vascular Pulmonary Laboratory, University of Colorado, School of Medicine)

4:15 P.M. "EARLY RECOGNITION AND TREATMENT OF LIVER DISORDERS"

DANIEL S. ELLIS, M.D., of Brookline, Massachusetts

(Assistant Physician, Massachusetts General Hospital; Assistant in Medicine, Harvard Medical School)

6:00-7:00 P.M. RECEPTION . . . At the Narragansett Hotel

(For members of the Society and their guests)

7:00 P.M. DINNER . . . At the Narragansett Hotel

Anniversary Chairman: HERMAN A. LAWSON, M.D.

Greetings

HONORABLE DENNIS J. ROBERTS

Governor of the State of Rhode Island

Address

"THE CHALLENGE OF SCIENCE"

CHARLES H. SMILEY, Ph.D.

(Professor of Astronomy, Brown University)

NIGHT and DAY

patients appreciate the effectiveness of **LUASMIN** in controlling the distressing symptoms of **bronchial asthma . . .**

A capsule and an enteric-coated tablet at bedtime generally results in an uninterrupted **night** of sleep—**and** if needed, capsules give relief during the **day.**

LUASMIN

Enteric Coated Tablets and Capsules

provide

Theophylline Sodium Acetate ..... (3 gr.) 0.2 Gms.
Ephedrine Sulfate ..... (½ gr.) 30 Mg.
Phenobarbital Sodium ..... (½ gr.) 30 Mg.

Also available in half-strength.

For samples just send your Rx blank marked 15-LU-4

Brewer EST. 1852

BREWER & COMPANY, INC. WORCESTER 8, MASSACHUSETTS U.S.A.

16TH ANNUAL CONGRESS ON INDUSTRIAL HEALTH

DETROIT, MICHIGAN, JANUARY 22-24, 1956

REPORT OF STANLEY SPRAGUE, M.D., *Representative of the Rhode Island Medical Society*

AS HAS BEEN the procedure at previous meetings of the conference, the major program was preceded by a day of discussion of state industrial health programs by the various representatives of the medical societies meeting with officers and members of the Council on Industrial Health of the American Medical Association.

Reports were for the most part brief and highlighted the major activities of the individual state groups. Doctor William P. Shepard, chairman of the A.M.A. Council on Industrial Health, gave a brief talk, and Clark D. Bridges, acting secretary of the council since the death of Doctor Carl Peterson, spoke of some of the subjects that the council is interested in and is currently seeking data about to augment its studies. These subjects included such matters as plant hygiene programs for the doctor of medicine, liaison with management, noise control, occupational cancer, medical records, and physical examinations in industry. He also reported that the committee on occupational dermatoses is very active, and would shortly have a report of interest to every doctor engaged in industrial practice.

A handbook published by the council on relations of the doctor of medicine in industrial health was reviewed briefly by a member of the A.M.A. headquarters' staff who reported that the book has been approved by the council for distribution. The use of local professional relations committees of state medical societies to publicize the work of industrial health committees was also proposed.

Occupational Medicine in Industrial Relations

Various phases of the role of occupational medicine were discussed by outstanding speakers as the main program of the congress opened on January 23. A panel discussion arranged in cooperation with the University of Michigan school of business administration and the Institute of Industrial Health, presented views of the physician, the nurse, the employer, the major referee, and the employee. Highlights are briefly summarized as follows: The individual worker is entitled to respect as an individual; maintenance of good health increases production; careful placement in a certain job is important; each individual should be responsible for his own health, and pay for health needs out of his own pocket; very few insurance companies give away preventive service.

THE NURSE: Her job is a practical service; she sees all employees first and last, and must recognize "attitudes" as well as pain; she must use her own ideas; she should make visits throughout the plant to know exactly what each worker does; she needs the knowledge of a safety engineer; she must be a diplomat at times and get across to the worker the true attitude of the company; the first impression of new workers is important, and the nurse, as a counselor, can aid greatly in aiding workers to adjust to a new environment of employment; her information gained from employees must be confidential; she is really the *key* to good industrial relations.

THE EMPLOYER: Recognizes that people and their lives are far more important than mere machines; must have a positive attitude towards good pre-employment examinations, and re-examinations after periods of illness; must aid in development of a continuous hygiene inspection of the plant; must seek for elimination of unnecessary and disturbing noise; must recognize need for a competent doctor of medicine's services operating without interfering with the employee's individual family doctor; and he must help with greater efforts in preventive medicine in the future.

LABOR REFEREE: Gets few cases where medical facts are under arbitration. In general agrees that upon return to work each worker should secure his own family doctor's approval to re-engage in usual occupation.

THE EMPLOYEE: (Spokesman for the worker was Harry Read, assistant to the secretary-treasurer of the national AFL-CIO) Workers must be concerned with more than just their own job, they must see to it that safety is given priority at all times throughout every plant; the cost of health care is considered a part of the wage structure; the doctor must continue to recognize that understanding of the individual worker is invaluable in solving his health needs; nurses are underpaid for the many clerical tasks added to nursing duties; medical, safety and preventive medicine

continued on page 216

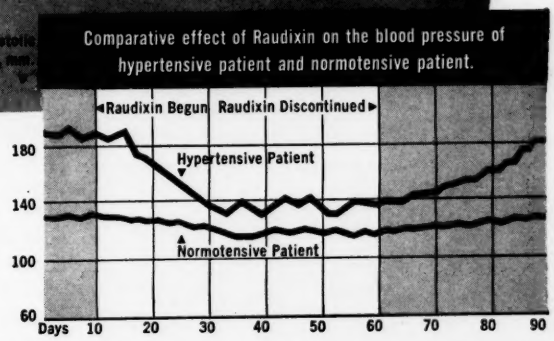
stable effect

RAUDIXIN

SQUIBB WHOLE ROOT RAUWOLFIA SERPENTINA

in anxiety and tension states . . .
stable ataractic (tranquilizing) effect
without excessive sedation

in hypertension . . .
stable hypotensive effect without rapid peaks and declines in blood pressure



DOSAGE: 100 mg. b.i.d. initially; may be adjusted within a range of 50 mg. to 500 mg. daily. Most patients can be adequately maintained on 100 mg. to 200 mg. daily.

SUPPLY: 50 mg. and 100 mg. tablets, bottles of 100, 1000 and 5000.

The hypotensive action of Raudixin is selective for the hypertensive state. For this reason, Raudixin does not significantly affect the blood pressure of normotensive patients.

SQUIBB

"RAUDIXIN"® IS A SQUIBB TRADEMARK

Before You Invest in Any Mutual Fund —

Remember . . . you can go just as far wrong in choosing a mutual fund as you can picking a single stock.

True, all mutual funds have unlimited capital structure. True, they all spread the risk over a variety of securities, and offer professional management. But look further . . .

There are five general types of mutual funds: (1) diversified bond-stock funds (2) diversified common-stock funds (3) bond funds (4) preferred stock funds (5) specialized funds. And within each of these classes are tremendous differences in policies and practices.

How to pick the best for you?

First, size up your own purpose of investing. Is it to get more income now? Later? To get some protection against inflation? Long-term capital growth? Some other objective?

Then, talk with us. We handle many mutual funds and know the advantages and disadvantages of each. Our guidance can give you a comparative analysis and enable you to choose the best for your purposes easily now.

DAVIS & DAVIS
Members New York Stock Exchange
GROUND FLOOR, TURKS HEAD BLDG.
Providence, R. I. — GAspee 1-7100
Market Summaries: GAspee 1-6004

CONGRESS ON INDUSTRIAL HEALTH

continued from page 214

should not be subjects for discussion at labor-management wage talks.

The Automotive Age

The problems of highway safety and the increasing death and accident toll exacted by the use of automobiles came in for lively discussion the second half of the first day of the congress. The human factor in the operation of motor cars was highlighted in a talk by Ross McFarland of the Harvard School of Public Health, who noted that: 1) there should be greater extension of driver training programs, 2) better matching of the driving job to the man employed, 3) consideration of the problem of the impairment of consciousness—i.e., a driver taking insulin should not operate a motor vehicle, 4) the accident rate is up for older people, especially if they are under stress, 5) alcohol use causes excess accidents, 6) car designs should be altered for human size, correcting the eye level vision, reaching ability, placement of brakes, etc., 7) eliminate tinted windshields as they are not too good for clear vision, particularly for night driving.

John O. Moore, of New York, director of automotive crash injury research of Cornell, reported that his agency is securing copies of forms made by state police at the scene of accidents in the various states. These records will be tabulated and most valuable scientific data should be accumulated that will aid in resolving some accident causes. The work to date enables the researchers to indicate in what part of a state there is the greatest possibility for an auto accident, and the seriousness of such an accident. In the ejection of a body from the car, he stated that 66% resulted in death or serious injury, and 38% were injured by windshields, open doors, instrument panels, or wheel assembly.

Licensure Problems

The auto licensing codes in the various states came in for criticism by Paul H. Blaisdell, director of the traffic safety division of the Association of Casualty and Surety Companies. He expressed the opinion that this department of the state's business was more political than anything else. The best control to prevent accidents, in his opinion, is cancellation of license. He ended his excellent talk with a proposal that each state add a fifty cent charge to its license fee, which money would be turned into a National Auto Research Fund that might realize as much as 35 million dollars annually to find answers to the problem of how to make our highways, and drivers, safer for everyone.

Looking to the future, Doctor S. E. Miller of the U.S. Public Health Service, pointed out that the medical requirements for drivers of heavy vehicles

differ from those who operate lighter machines. He maintained that each driver should have a medical examination for the first license, and the drivers of heavy machines should repeat the examination every three years, and have a thorough eye examination every year.

Absenteeism

Absence from work due to non-occupational illness and injury, something every Rhode Island doctor is quite familiar with as the result of the certification under our state temporary disability compensation program, was subject to complete review by five panels on the final day of the congress. It would be impossible for your representative to review the many interesting discussions that ensued during the day, and what follows represents (to your delegate at least) only a gleaning of some of the major comments which are presented to you in capsule form:

Social and economic changes increase absences due to sickness, and women absences are twice those of men.

Due to carrying methods and company policies, absentee records of many companies are unreliable when used in a total study of the problem.

55% of absences are for one, two or three days. The more absences, the less valuable a class A worker, the less desire for responsibility.

Non-occupational injury is eight times the rate of occupational injury.

Occupational hazard in work is a factor in the absence problem. Absence varies with the efficiency of the management in maintaining a good industrial health program.

Improved attitude of worker toward his job can cut down absences. Each employee must be made to feel that it is *pleasant* to come to work.

Common cold is the leading cause of absences. Seasonal causes include "fish bite fever" in the Spring, "baseball itch" in the summer, and "hunting haunting" in the Fall.

Sickness is due to both intrinsic and extrinsic causes, i.e., environment at home and at work.

Curran & Burton, Inc.

GENERAL MOTORS
HEATING EQUIPMENT

COAL OIL

17 CUSTOM HOUSE STREET
PROVIDENCE, R. I.
DExter 1-3315

EVERY WOMAN
WHO SUFFERS
IN THE
MENOPAUSE
DESERVES
"PREMARIN"

widely used
natural, oral
estrogen

AYERST LABORATORIES
New York, N.Y. • Montreal, Canada
5646

DISTRICT MEDICAL SOCIETY MEETING

PROVIDENCE MEDICAL ASSOCIATION

A meeting of the Providence Medical Association was held at the Medical Library on Monday, March 5, 1956. The meeting was called to order by the president, Dr. Robert R. Baldridge at 8:30 P.M.

The reading of the minutes of the previous meeting was omitted.

Report of the Executive Committee

In the absence of the secretary the report of the Executive Committee was read by the executive secretary, as follows:

At a recent meeting the Executive Committee took the following actions:

It approved of the appointment by the president of Dr. Anthony Migliaccio to fill the unexpired term as a member of the Executive Committee of Dr. Thomas L. Greason.

It approved of a letter from the president to the membership relative to the problem of securing physicians for emergency medical calls directed to the Association's Medical Bureau.

It received, reviewed and placed on file the annual financial report of the Medical Milk Commission of the Association.

It approved of the appointment of a committee by the president to meet with a Providence resident interested in establishing a Professional Men's Association financing plan in Providence.

Action: The report of the Executive Committee was received and placed on file.

Butterfield's
DRUG STORE
Corner Chalkstone & Academy Aves.
ELMHURST 1-1957

Announcement of the President

Dr. Robert R. Baldridge called attention to the Cancer Conference of Rhode Island physicians to be held at the Medical Library on March 14.

He also expressed his appreciation for the Executive Committee to the members of the Association who had already replied to his letter asking for cooperation with the Medical Bureau in handling emergency calls for physicians. He paid particular tribute to Dr. Mark Yessian, who has never failed to answer a request from the Bureau for emergency service.

Nominations for Election to Membership

The executive secretary reported that the Executive Committee recommended for election to active membership in the Association the following: George Vincent Coleman, M.D.; Stanley Simon, M.D., and Charles W. Does, M.D.

Action: It was moved that these applicants be elected active members of the Association. The motion was seconded and passed.

Dr. Baldridge introduced Dr. William H. Sweet, Associate Clinical Professor of Surgery, Harvard Medical School; an official delegate from the United States to the Geneva Conference held in August, 1955. He spoke on the *Geneva Conference on Atoms for Peace.* Dr. Sweet emphasized the importance of atomic energy by pointing out that if the entire world were using the known natural sources of energy as rapidly as does the United States, these sources would be entirely used up in a half century.

The broad outlines on which the Geneva Conference were held were described, and a detailed account given of a small nuclear reactor in actual operation as an exhibit. Dr. Sweet's concluding remarks concerned the good relationship attained with the Russian scientists in spite of a severe language problem.

The meeting was adjourned at 10:00 P.M.

Attendance was 74.

Collation was served.

PATRONIZE JOURNAL ADVERTISERS

when neuritis strikes

how long need it last?

Instead of enduring long weeks of pain and disability, your patients with inflammatory radiculitis (of non-traumatic or non-mechanical origin) can usually be quickly relieved with Protamide. When used promptly—within a few days after onset of pain—complete recovery can be expected in just a few days.

Published studies* and experience in many thousands of cases treated in private practice demonstrate these advantages—even in types of neuritis intractable to older therapies. You can duplicate these results in your practice. Keep Protamide on hand for use at the patient's first visit.

Available at pharmacies and supply houses—boxes of ten 1.3 cc. ampuls.

use **PROTAMIDE®** *promptly*

... one ampul daily, intramuscularly

Sherman Laboratories Detroit 11, Michigan

* A portfolio of all published studies will be sent on request

A CLINICAL ANALYSIS OF HR 7225

Social Security Amendments of 1955

Why should Physicians be concerned with HR 7225?

THE PRIMARY REASON physicians should be *vitally* interested in HR 7225 is that it directly affects medical practice.

This proposed national legislation would make several changes in the Social Security Act. The most important medical change would graft a *cash disability benefit system* onto Social Security. It would provide monthly payments to permanently and totally disabled persons who are over 50 and covered by Social Security. The payments would be a statutory right, to be paid regardless of the recipient's financial status.

Determination of disability would involve certification by a *private physician*, supervised by state agencies. Payment for this medical service may come from the federal government.

HR 7225 further stipulates that a disabled person will *not* be eligible for cash benefits unless he accepts vocational rehabilitation. Here, again, medical services would be required, with payment provided, at least in part, by the federal government.

The impact of such a federal cash disability system on medical practice is clear. In addition to the inevitable governmental regulation of medical services to the disabled, physicians would find themselves under constant pressure from politicians, administrators and patients seeking disability certifications.

How is HR 7225 related to the Social Security System?

Social Security was enacted in 1935 to provide a floor of economic security for retired workers at age 65. Since then, the Act has been amended repeatedly to expand coverage and liberalize benefits.

The American Medical Association has never taken a position regarding Social Security *per se*. In recent years, however, many amendments have been offered seeking to add various medical benefits to the straight support payments originally authorized for retired workers. In these instances, A.M.A. has evaluated them and informed Congress of medicine's views.

Only one of the proposed amendments has been adopted. This is the so-called "disability freeze," enacted in 1954. It authorized the exclusion of periods of permanent and total disability in the computation of cash benefits.

A.M.A. objected because the "freeze" tied in disability with eligibility for Social Security benefits, thus involving physicians in disability certificaton for the federal government and establishing a precedent. Although it affects but a small amount of the population, the A.M.A. correctly predicted that it was the first move in a new campaign to convert the Social Security Act into a government medical program. HR 7225 is the second maneuver.

What is Current Status of HR 7225?

HR 7225 was considered by the House Ways and Means Committee in June, 1955. Despite strong protest, no public hearings were allowed. This denial was unusual, especially in view of the far-reaching effects of the bill. HR 7225 was adopted in the House and now awaits consideration by the Senate. Hearings are scheduled by the Senate Finance Committee early next year.

Why the Need for More Study?

Many questions are unanswered about permanent and total disability. Its definition is uncertain. How many would be involved in the proposed amendment? How much would it *really* cost and how much would taxes go up? What would happen in a depression? Experience shows that the prevalence of "permanent" disability varies inversely with economic conditions. And finally, what, exactly, is being done for the disabled now?

The subject obviously is too complex for hasty, superficial consideration. A.M.A. currently is re-examining the whole problem of permanent and total disability and is conducting surveys in many areas. Deficiencies undoubtedly will be uncovered, but A.M.A. hopes to make recommendations which are both constructive and sound.

Other concerned groups are making studies, too. Congress should await these findings and then give the subject the sober consideration it deserves.

Why is it Urgent that you do something NOW about HR 7225?

Whatever the merits of the Social Security System, it is apparent to any student of politics that the "give-away" of government benefits in an

concluded on page 228

Disability Insurance Planning

is a

Highly specialized field !

The professional Planner needs the facilities of many companies, years of practice on actual cases and a truly professional attitude.

Why settle for less than the best, when we are available for consultation, without obligation.

R. A. Derosier Agency
Administrators
32 Custom House Street
Providence 3, Rhode Island
GAspee 1-1391

Wherever you go forget your telephone calls We'll take them for you, day or night.

MEDICAL BUREAU of the Providence Medical Association

...from Two Outstanding Cases

RED LABEL • BLACK LABEL
Both 86.8 Proof

Johnnie Walker stands out in its devotion to quality. Every drop is made in Scotland. Every drop is distilled with the skill and care that come from generations of fine whisky-making. And every drop of Johnnie Walker is guarded all the way to give you *perfect* Scotch whisky... the same high quality the world over.

BORN 1820...
STILL GOING STRONG

JOHNNIE WALKER
BLENDED SCOTCH WHISKY

CANADA DRY GINGER ALE, Inc., New York, N. Y., *Sole Importer*

THROUGH . . . the Microscope

HILL-BURTON GRANTS IN R. I.

Our latest available figures show that grants to Rhode Island under the Hill-Burton act to provide hospital accommodations represents a federal contribution of $2,381,828. This payment is included in the total cost of $9,320,450 for nine projects completed and in operation. In addition, for four projects now under construction at a cost of $10,328,654, the federal grants being contributed amount to $566,327. The latest projects will supply 166 additional beds, while the nine previous constructions for which federal funds were contributed supplied 386 additional beds.

MORTALITY RATE DOWN 46%

America's crude mortality rate has dropped an amazing 46% since 1900—from 17.2 deaths per 1,000 population in 1900 to 9.2 in 1954—according to PROGRESS IN HEALTH SERVICES, a new monthly Health Information Foundation bulletin which will interpret, in graphically-illustrated form, complicated health statistics for layman understanding.

"Crude" mortality is based upon the number of deaths recorded in a calendar year per 1,000 population—regardless of age, sex and cause of death. The Foundation noted that, if 1900 mortality rates had prevailed in 1950, the nation would have had slightly more than twice the deaths that occurred that year.

CANCER PROGRAMS IN HOSPITALS

In a new manual for hospital cancer programs the American College of Surgeons' department of professional services and accreditation has set forth the minimum requirements for approval of a cancer program. One major must is a properly functioning registry of cancer patients in order to maintain a continuing record of successes and failures in the management of patients in every hospital seriously concerned with the treatment of the disease.

DENTAL RESEARCH NEEDS CITED

Seeking an increase in the budget of the National Institute of Dental Research from close to three million dollars to six million, Doctor Harold Hillenbrand, secretary of the American Dental Association, told the House Appropriations Committee that research could be particularly effective in—

Dentifrices—"No toothpaste to date has been shown to be effective in controlling tooth decay in spite of the claims that are made. But dental research holds out the hope that this objective can eventually be achieved."

Sugar—"It may be that dental research can find or develop a sugar which will not cause decay of the teeth."

Crooked teeth—"There is the possibility that millions of children can be spared the deforming and disabling conditions which accompany severely crooked teeth by extended research in the field of child growth and development in the science of orthodontics."

Health insurance—"There is the possibility that dental research can so alter the course of dental diseases so as to permit the offering of insurance protection under programs similar to Blue Cross and Blue Shield."

Heart disease—"Further light could be cast on the relation between dental disease and heart disease as was done in the prevention of subacute bacterial endocarditis, an often fatal heart condition, by adequate antibiotic treatment before dental operations."

TURNING THE WHEELS

Doctors are often accused of talking in a "language" of their own. The CONGRESSIONAL RECORD recently included a glossary of terms used to keep the wheels turning in government and industry, as prepared by Representative Hinshaw of California. Here they are:

Program: Any assignment that cannot be completed with one phone call.

Channels: The trail left by interoffice memos.

Coordinator: The guy who has a desk between two expediters.

concluded on page 224

a great new fortified aqueous vitamin formula

new ... provides

growth-promoting vitamin B_{12}

lipotropic choline, betaine, inositol
to aid carbohydrate and fat metabolism

anti-convulsant vitamin B_6

... other essential B-complex factors

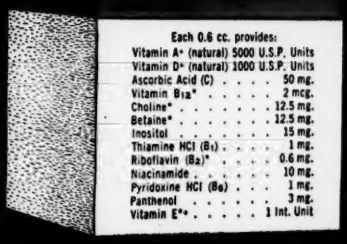
vitamin E for muscle tone

100% natural vitamins A and D
—water soluble, better utilized

deliciously flavored

no burp, no fish oil taste
or odor — allergens removed

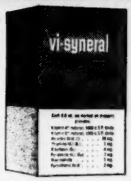
vi-syneral
fortified • flavored



Each 0.6 cc. provides:	
Vitamin A* (natural)	5000 U.S.P. Units
Vitamin D* (natural)	1000 U.S.P. Units
Ascorbic Acid (C)	50 mg.
Vitamin B_{12}*	2 mcg.
Choline*	12.5 mg.
Betaine*	12.5 mg.
Inositol	15 mg.
Thiamine HCl (B_1)	1 mg.
Riboflavin (B_2)*	0.6 mg.
Niacinamide	10 mg.
Pyridoxine HCl (B_6)	1 mg.
Panthenol	3 mg.
Vitamin E**	1 Int. Unit

vi-syneral vitamin drops fortified (flavored)

available as before



regular
vi-syneral vitamin drops (unflavored)

Samples? write...
u. s. vitamin corporation
(Arlington-Funk Laboratories, division) • 250 East 43rd St. • New York 17, N. Y.

THROUGH THE MICROSCOPE

concluded from page 222

Consultant or expert: Any ordinary guy more than 50 miles away.

Under consideration: Never heard of it.

Under active consideration: We are looking in the files for it.

Conference: Where conversation is substituted for the dreariness of labor and the loneliness of thought.

Committee: A means for evading responsibility.

Board: First, made of wood; second, long and narrow; and, third, sometimes warped.

Reliable source: The guy you just met.

Informed source: The guy who just told the guy you just met.

Unimpeachable source: The guy who started the rumor originally.

Make a survey: Need more time to think of an answer.

Note and initial: Spread the responsibility.

Clarification: Fill in the background with so many details that the foreground goes underground.

Check the files: Ask the janitor to look through yesterday's sweepings.

Finalize: Scratch gravel to cover errors.

MEDICAL ASPECTS OF AUTO INJURIES

Discussing this subject recently Doctor Fletcher Woodward, chairman of the A.M.A.'s committee on medical aspects of automobile injuries and deaths, pointed out that last year there were nearly 2½ million auto casualties, 38,000 of whom were killed, and one out of every twelve autos was in a serious crash. He reported that by slow and methodical compilation of statistics by the individual physician, by universities and by public and governmental agencies, it has become apparent that redesign of the machine itself could prevent many of these injuries and deaths.

Suggested new designs would include 1) safety belts and body harnesses to prevent head, face and leg injuries of guest passengers; 2) crash padding on the dash; 3) an ejectable windshield; 4) collapsible steering wheel and column; 5) eradication of projecting knobs and buttons; 6) firm anchorage of seats; 7) higher seat backs to prevent whiplash neck injuries; 8) safety locks on doors to prevent them popping open on impact; 9) warning devices on the speedometer; 10) dull paint to prevent glare; and 11) better shock absorbers.

Fuller

Memorial Sanitarium

Located on Rt. 1

South Attleboro, Massachusetts

A modern non-profit hospital for the care and treatment of nervous and emotional disorders as well as long term geriatric problems.

Physical, neurological, psychiatric and psychological examinations.

Modern recognized psychiatric therapies.

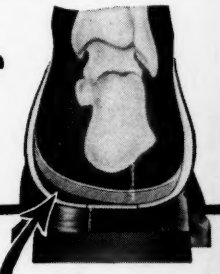
A pleasant homelike atmosphere in a beautiful and conveniently located institution.

L. A. Senseman, M.D., F.A.P.A., Medical Director
Edwin Dunlop, M.D. Oscar E. Stapans, M.D.
Oliver S. Lindberg, M.D. Michael G. Touloumtzis, M.A.
William H. Dunn, M.S.W.

Referred patients are seen daily (except Saturdays) 9-12 A.M., and by appointment.
R. I. Blue Cross Benefits Tel. Southgate 1-8500

Special Rates for Long-Term Care

Foot-so-Port Shoe Construction and its Relation to Weight Distribution



- Insole extension and wedge at inner corner of heel where support is most needed.
- Special Supreme rubber heels are longer than most anatomic heels and maintain the appearance of normal shoes.
- The patented arch support construction is guaranteed not to break down.
- Innersoles are guaranteed not to crack, curl, or collapse. Insulated by a special layer of Texon which also cushions firmly and uniformly.
- Foot-so-Port lasts were designed and the shoe construction engineered with orthopedic advice.
- *Now Available!* Men's conductive shoes. N.B.F.U. specifications. For surgeons and operating room personnel.
- By a special process, using plastic positive casts of feet, we make more custom shoes for polio, club feet and all types of abnormal feet than any other manufacturer.

Write for details or contact your local **FOOT-SO-PORT** *Shoe Agency. Refer to your Classified Directory*

Foot-so-Port Shoe Company, Oconomowoc, Wis.

ISOLATE
THE
ULCER!
Since the ulcer patient usually can not get away from it all, prescribe MONODRAL with MEBARAL to more effectively isolate the ulcer from the patient physiologically.
MONODRAL with MEBARAL controls hyperacidity by a proved superior antisecretory action.
Controls hyperirritability and hypermotility of the upper gastro-intestinal tract, relieves pylorospasm.
Induces a serenity of mind without affecting mental alertness, softens the emotional impact of environmental stimuli.
Controls the psychovisceral component of peptic ulcer; lessens gastro-intestinal tension by diminishing reflex motor irritability.
MONODRAL with MEBARAL Tablets, 1 or 2 tablets three or four times daily; each tablet containing 5 mg. MONODRAL bromide and 32 mg. MEBARAL. Bottles of 100 tabl
New York
MONODRAL® with MEBARAL®
FOR COMPLETE CONTROL
of peptic ulcer
Monodral (brand of penthienate) and Mebaral (brand of mephobarbital), trademarks reg. U.S. Pat. Off.

J. E. BRENNAN & COMPANY
Leo C. Clark, Jr., B.S., Reg. Pharm.
Apothecaries
5 North Union Street Pawtucket, R. I.
SHELDON BUILDING
7 Registered Pharmacists

MAGAZINE SUBSCRIPTIONS
Subscriptions for all types of magazines including medical journals, also renewals of subscriptions, arranged for your home and office.
RICHARD K. WHIPPLE, M.D.
25 Algonquin Rd. Rumford 16, R. I.
Tel. EAst Providence 1-2505

PRELIMINARY REPORT OF THE HEALTH DEPARTMENT FOR THE YEAR 1955, CITY OF PROVIDENCE, RHODE ISLAND

Of the 3319 deaths occurring in Providence during 1955, close to 40 per cent were non-residents who came to our city in their terminal illness. The adjusted death rate, therefore, is eight per one thousand population as compared to the crude rate of thirteen. One thousand four hundred twenty-one of the 3319 deaths were persons over seventy years of age. The 10,350 births are the second highest in the city. The infant mortality rate of 21.26 is one of the lowest on record.

1955 was a measles and whooping cough year. Both of these epidemics began in 1954 and petered out in 1955. There were no deaths from measles, though one Providence child died of whooping cough.

For the first time in modern history, the City of Providence experienced a two-month consecutive period without a death from pulmonary tuberculosis, or having a Providence resident die of tuberculosis during November and December.

During the year 1955, infantile paralysis appeared in epidemic form in New England; however, owing to the immunization campaigns of 1954 (and 1955) when Providence was accepted for the pilot test, only a sixth of the cases treated at Chapin Hospital were Providence cases. In previous years 40 per cent of the cases treated at Chapin Hospital were Providence residents. Of the twenty-three deaths from infantile paralysis that occurred during the year, only three were Providence residents. It would seem that our immunizations prevented from fifty to one hundred cases and from ten to fifteen deaths. From a purely monetary point of view, the seven to ten thousand dollars that the City of Providence spent on the immunization program, saved from one hundred to two hundred thousand dollars, as the average case costs $2,000.00.

Not only did we proceed with our own program of immunization for poliomyelitis, but the City of Providence Health Department has been assisting other communities in planning their programs. While we had hoped to immunize all 15,000 school children eligible under the National Foundation Program by December 31, 1955, unfortunately 8,000 children were kept away from completing their immunizations by untoward publicity. However, we feel that now that the value of the immunization has been proven, and the safety of the procedure re-established, we will experience full cooperation from the public and medical profession in our efforts to immunize against this disease. It is our hope that polio will soon join diphtheria and smallpox as a conquered disease.

The last case of diphtheria to occur in Providence, was in July 1951, however, we had one non-

continued on page 228

one tablet t.i.d.

DECHOLIN® *with* Belladonna

(dehydrocholic acid and belladonna, *Ames*)

***hydrocholeresis*—more fluid bile** enhances biliary flow over 100 per cent[1]—protects against bile stasis and excessive concentration, often associated with gallstone formation.[2,3]

spasmolysis combats biliary dyskinesia—relieves hypertonic dyskinesia, frequently present in pregnancy[2]—helps prevent related pain, nausea and vomiting.

and natural laxation without cathartics prevents colonic dehydration[4] and biliary constipation—gets to the physiologic stimulant to evacuation. . . .[3,4]

Decholin with Belladonna Tablets: dehydrocholic acid 3½ gr. and extract of belladonna ½ gr. Bottles of 100 and 500.

(1) Crenshaw, J. E.: Am. J. Digest. Dis. 17: 187, 1950. (2) Lichtman, S. S.: Diseases of the Liver, Gallbladder and Bile Ducts, ed. 3, Philadelphia, Lea & Febiger, 1953, vol. 2, p. 951. (3) Sherlock, S.: Diseases of the Liver and Biliary System, Springfield, Charles C. Thomas, 1955, p. 642. (4) King, J. C.: Am. J. Digest. Dis. 23: 102, 1956.

AMES COMPANY, INC • ELKHART, INDIANA
Ames Company of Canada, Ltd., Toronto

A CLINICAL ANALYSIS OF HR 7225

concluded from page 220

election year is a strong temptation to those who are not concerned with the long-range welfare of the country.

Once medical benefits are included under the system, it is certain that pressure groups will try to expand and liberalize them, moving step by step toward government medicine.

As the A.F. of L.'s AMERICAN FEDERATIONIST recently stated, "The really significant gain in these (1954) amendments was not the so-called 'freeze' of benefit rights, but the fact that in its adoption the precedent for the determination of disability under terms of a federal program was established and provision was made for rehabilitation services." The same publication further indicated that the first real political test for labor, following the merger of the CIO and A.F. of L., would come on HR 7225!

To Summarize A.M.A. Thinking Regarding HR 7225:

1. **This Bill would have a far-reaching impact on the practice of medicine, and an unpredictable financial effect on the Social Security system.**
2. **This legislation needs far more study *before any action is taken.***
3. **No crisis exists to warrant immediate passage.**
4. **Cash handouts would hinder rather than promote rehabilitation, because successful rehabilitation would mean loss of the cash benefit.**
5. **Social Security should be taken out of politics.**

Talk to your friends. Ask for a complete study before adding further costs to expand Social Security benefits.

PRELIMINARY REPORT – PROVIDENCE HEALTH DEPARTMENT

continued from page 226

resident in 1952 and two non-residents in 1954. During the year, two cases of typhoid fever occurred. In both instances the source of infection was a family carrier.

May 1956 will complete the first hundred years functioning of the Health Department of the City of Providence. This hundred years has seen the death rate cut to more than half and has seen the average life expectancy more than doubled. At the same time our infant mortality rate has gone down from 150 per thousand births to approximately twenty per thousand. During this entire period the Health Department of the City of Providence had been recognized nationally as outstanding, yet at no time did the expenditures for the department reach 50 per cent of the recommended minimum. This could never have been accomplished but for the wholehearted cooperation of all the employees of the Health Department, and our local practicing physicians, district nurses and associated agencies, all working toward the common goal of better

Trasentine®-Phenobarbital

integrated relief . . .
mild sedation
visceral spasmolysis
mucosal analgesia

TABLETS *(yellow, coated), each containing 50 mg. Trasentine® hydrochloride (adiphenine hydrochloride CIBA) and 20 mg. phenobarbital.*

CIBA
Summit, N. J.

2/2228M

health and better living in Providence.

During 1955 40 per cent of all deaths were due to heart disease and 18 per cent were due to cancer. A hundred years ago, heart only accounted for 3½ per cent and cancer for slightly over 1 per cent of the deaths occurring in the City of Providence. While contagious diseases accounted for over half of the deaths a hundred years ago, we have exceptionally few deaths attributable today to these causes. In 1855 consumption was listed as the cause of over 22 per cent of the deaths. Dysentery, diarrhoeas, typhoid and intestinal diseases of the child accounted for about 14 per cent of the deaths. Today, tuberculosis accounts for less than one per cent of all deaths and dysentery, diarrhoeas for less than one half per cent of all deaths. In 1855 the causes of death listed in order of frequency were: (1) consumption, (2) cholera infantum, (3) scarlet fever, (4) convulsions, (5) dysentery, (6) diarrhoea, (7) old age, (8) typhoid, (9) heart disease, accidents and croup were tied for tenth place. Fifty years ago in 1905 the causes of death in Providence listed in accordance of frequency were as follows: (1) pneumonia, (2) tuberculosis, (3) heart disease, (4) nephritis, (5) cancer, (6) dysentery and diarrhoea, (under two), (7) accidents, (8) diseases of early infancy.

In keeping with the change in the causes of death, we note that in 1855, more than 75 per cent of all deaths were in individuals under forty and only 4 per cent were in individuals over eighty. Last year only 12½ per cent of all deaths were individuals under forty and 17½ per cent were individuals over eighty. Through more positive health practices we have eliminated the main causes of death among the young children and young adults. Today more than half the deaths among the male population are over sixty-five years of age, with the largest number in the ages of sixty-five to sixty-nine, while more than 50 per cent of the deaths among females are in the age group over seventy, with the largest number in the age group seventy-five to seventy-nine.

Not only are people living longer these days, but their general physical condition is such as to enable them to enjoy the added years of life. Unfortunately however, many industries and business concerns insist upon retirement at the age of sixty-five. It may be necessary for us to plan how to keep such men and women active. In some cases these individuals will have to be gainfully employed. As health and medical practice increases in efficiency, this problem will become more and more acute.

JOSEPH SMITH, M.D.
Superintendent of Health

FIRST ANNUAL POSTGRADUATE DAY

at the

ROGER WILLIAMS GENERAL HOSPITAL

Wednesday, May 23, 1956 — 10:00 A.M. to 5:00 P.M.

MORNING SESSION

"PRESENTATIONS OF ASPECTS OF RHINOPLASTY"
FRANK MACCARDELL, M.D.

"CARDIAC SURGERY"
LELAND JONES, M.D.

"DEMONSTRATION OF ANGIOGRAMS"
JOHN VESEY, M.D.

"TREATMENT OF BURNS"
BRADFORD CANNON, M.D.
(Massachusetts General Hospital)

AFTERNOON SESSION

Lectures by: Langdon Parson, M.D., on Gynecology; William Malamud, M.D., on Psychiatry; James Metcalf, M.D., on the Cardiac in Pregnancy; Benjamin Tenney, M.D., on Toxemia of Pregnancy, and Louis Diamond, M.D., on Erythroblastosis Foetalis.

Sessions open to All Members of the Rhode Island Medical Society

---

WOMAN'S AUXILIARY TO THE RHODE ISLAND MEDICAL SOCIETY ANNUAL MEETING

At the Rhode Island Country Club, Barrington, Rhode Island

THURSDAY, MAY 3

Presiding: MRS. PATRICK A. DURKIN, *President*

11:45 A.M. BUSINESS MEETING
(Annual Reports, Revisions of By-Laws and Election of Officers)

1:00 P.M. LUNCHEON (Advance reservation required)

1:45 P.M. GREETINGS
FRANK B. CUTTS, M.D., of Providence, Rhode Island
(President, the Rhode Island Medical Society)

PRESENTATION OF PRESIDENT'S PIN

2:00 P.M. ADDRESS: "THE ART OF PUBLIC RELATIONS"
MR. LEO E. BROWN, of Chicago, Illinois
(Director, Department of Public Relations, American Medical Association)

Advertising is at Its Best in Medical Journal Displays!
Read the Ads in Your Journal Each Month!

INDEX OF ADVERTISERS — *April*

	PAGE		PAGE
American Meat	182	H. P. Hood & Sons	178
Ames Company, Inc.	227	Knox Gelatine Co.	187
E. P. Anthony	202	Lakeside Laboratories	179
Ayerst Laboratories	217	Eli Lilly and Company	Front Cover
Baker Laboratories	184	Mead Johnson & Company	Back Cover
J. E. Brennan	226	Medical Bureau	221
George A. Breon & Company	186	Munroe Dairy	188
Brewer & Company	213	Parke, Davis & Company	Inside Front Cover and 173
Butterfield's Drug	218	Pfizer Laboratories	Third Cover and 190
Ciba Pharmaceutical Company	209, 229	Physicians Service	180
Coca-Cola	228	Wm. P. Poythress	177
Curran & Burton	217	Sealy Mattress Company	188
Davis & Davis	216	G. D. Searle	207
Derosier Agency	221	Sherman Laboratories	219
Desitin Chemical Company	174	Smith, Kline & French	189
Doho Chemical Corporation	175, 176	E. R. Squibb	215
Duffy My Druggist	206	Upjohn Company	185
Endo Products, Inc.	183	U.S. Vitamin	223
Foot-so-Port Shoe Company	224	Johnnie Walker	221
Fuller Memorial Sanitarium	224	Warwick Club Beverages	226
Geigy Pharmaceutical Company	211	Winthrop Laboratories	225

THE RHODE ISLAND ASSOCIATION OF MEDICAL RECORD LIBRARIANS

ANNUAL MEETING

At the Rhode Island Medical Society Library

WEDNESDAY, MAY 2

10:00 A.M. BUSINESS MEETING

Presiding: MISS MARY CHEEVER, R.R.L., *President*

11:00 A.M. INVOCATION

THE REVEREND WARREN R. WARD

(Rector, St. Stephen's Church, Providence, Rhode Island)

"INTERPERSONAL RELATIONSHIPS"

MR. HERBERT A. RUESCH

(Chief Clinical Psychologist, Mental Hygiene Services, Providence, Rhode Island)

Of course you will be there!

ANNUAL DINNER and GOLF TOURNAMENT

of the

PROVIDENCE MEDICAL ASSOCIATION

on

WEDNESDAY, JUNE 6

at the

Rhode Island Country Club

Barrington, R. I.

Golf Tournament starts at 1:00 P.M.

Annual Dinner at 7:00 P.M.

Prizes . . . TOP-FLIGHT ENTERTAINMENT

DON'T MISS IT!